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Let the Best Story Win - Evaluation of the Most Cited Business History Articles

Abstract

Faced with intensifying competition for scientific impact measured in terms of citation counts, small disciplines are challenged to prove their importance as they lack the critical mass to accumulate large numbers of citations. This paper demonstrates that by emphasizing theoretical and methodological rigor even small disciplines such as business history can be competitive. Yet it still appears that readers of business history articles first and foremost seek interesting and useful subject matter, i.e. “best” stories that can be used as background information and as tools in comparisons. However, articles advancing theory and methodology have increasingly gained interest and citations from other business historians as well as from scholars in related disciplines. Thus, business history scholarship using a sound theoretical framework to analyse relevant cases score more citations both inside and outside the field, leading to fruitful debates that serve to enhance the discipline.

1. Introduction

Why do scholars refer to business history journals in their research? The obvious and simple answer is that the most cited articles are interesting. But what is it that makes a business history article interesting? Is it the topic of the paper, the findings, the methods applied, the theoretical contribution, the reputation of the scholar, or the overall high quality of the article? Might it be the novelty or controversial nature of the subject or the style of argumentation the scholar has chosen? In this article we discovered an increasing trend in citations to business history articles and that research with a topic or theoretical framework appealing to neighbouring disciplines tended to gain citations over disciplinary borders.

Growing accountability demands for demonstrable scholarly impact have recently led to increased attention paid to the importance of citations. Universities, university departments, individual academics, journals, and even disciplines are pursuing higher citation impact. Much criticism has been levelled at citation counts, especially in fields like history, which do not amass such numbers of citations as, for example, in natural sciences (Zuccala and al., 2015). Small research fields – like business history - may also suffer from the use of citation counts as an impact measure simply because they do not have enough critical mass to accumulate large numbers of citations.

Indeed, in numbers of citations even the major business history journals are lagging behind mainstream economics and management journals (Friedman and Jones, 2011)¹. This is purely and simply because the business history research community is small and diverse, with only few scholars widely reputed outside the discipline. Second, some disciplinary practices, such as the tendency of history scholars to publish in books rather than in journals (Zuccala and al., 2015) and craftsmanship-related technicalities typical for history research may partially explain low citation counts. On the other hand, the position of business history between the “big ones” (history, business and management studies, and economics) may provide competitive opportunities for

¹ 2015 The WoS Impact Factor for *Business History* was 0.709 and 0.634 for *Business History Review*.

citations – assuming that the contents appeal to scholars in related disciplines. Third, yet another explanation for low citation rates, but rather painful for business historians, may be that the historical turn in organizational studies and social sciences has been somewhat overemphasized in the self-reflective flow of articles by business historians.

Business history is an established field of research with two long-established flagship journals *Business History Review* (established 1926) and *Business History* (established 1958) (see especially Friedman and Jones, 2011; Harvey and Wilson, 2007; Wilson and Toms, 2008). Nevertheless, in the last decade or so the discipline has gone through a process of critical self-reflection in a number of articles and books.² The major questions have pertained to what the position of the field will be between such neighbouring disciplines as (economic) history and organization studies, and what methods and theories will be used by future business historians (especially Perchard, MacKenzie, Decker & Favero, 2017; de Jong, Higgins and van Driel, 2015; Decker, Kipping and Wadhvani, 2015; Jones, van Leeuwen, and Broadberry, 2012).

These questions have been raised as the traditional “history-oriented” journals have become objects of interest among management scholars; new journals have emerged, and historians have published their work in the mainstream management journals. Moreover, new associations have been established, and business history tracks and divisions in major management conferences EGOS and Academy of Management have emerged respectively. Furthermore, the argument “history matters”, originally launched by institutional economic historians at the turn of the 1990s, has gained support among organization researchers and social sciences (Rhode and al. 2011; Brunninge, 2009; Rowlinson and al., 2010). Some authors claim that an “historical turn” has occurred in organizational studies (Kieser, 1994; Üsidiken and Kieser, 2004, Clark and Rowlinson, 2004; Rowlinson, 2015) as more research in the field is conducted using historical cases, methods, and approaches (recently e.g. Godfrey and al., 2016; Kipping and al., 2014; Kipping and Üsidiken, 2014; Rowlinson, Hassard and Decker, 2014), while others have been more cautious about the ahistorical tendencies of management scholars in their business history research (Kobrak and Schneider, 2011; Decker, 2016).

Furthermore, different fields of history, organizational studies, and economics have proposed varying agendas for business history, including an evolutionary perspective (Winter, 2013; Raff, 2013), a focus on entrepreneurship, innovation, globalization, environment, government, and democracy (Friedman and Jones, 2011), ethnomethodology (Whittle and Wilson, 2015), and cultural and narrative approaches (Walton, 2010; Hansen, 2012; Mordhorst, 2014). Possible future topics of the discipline were recently discussed in a special issue of *Business History* with the emphasis on methodological plurality and explicitness (de Jong, Higgins and van Driel, 2015; Decker, Kipping and Wadhvani, 2015). Business history could also provide material for some of the discussions in management studies and economics, such as the origins of organizational capabilities (Winter, 2012), the role of family business and entrepreneurship in economy (for

² See, for example, special issues in honor of the late Alfred D. Chandler Jr in *Business History Review* 2008:2 and *Enterprise & Society* 2008:3 - see also *Enterprise & Society* 2009 special issue on interplay between management studies and history research and special issues of *Business History* on new business histories (2015) and business longevity (2015). For books, see especially Jones and Zeitlin (eds.) 2007; Amatori & Jones 2003, and Wilson, Toms, de Jong, and Buchnea (Eds.) 2016.

example Colli et al., 2013; Colli and Larsson, 2014; Casson, 1999, 2010), and underrepresented temporal elements of the resource-based view (Locket and Wild, 2013).

Regardless of the reasons, business history as a discipline has grown remarkably during the past 20 years. This growth accelerated during the 1990s and early 2000s as new journals were launched (like *Management and Organizational History* and *Enterprise & Society*) and at the same time the older and more established ones increased the number of issues published per year. New journals have a tendency to generate further publications in the field and also in other publishing outlets, as has recently been shown in the case of maritime (economic) history (Ojala and Tenold, 2013).

Thus, it is interesting and vital to analyse *who* refers to business history research and in which contexts. Therefore, the aim of this study is to analyse the origins of the citations to business history scholarship: when, why, and how it is cited? We do this here by analysing the articles referencing the most cited articles published in *Business History* (BH) and *Business History Review* (BHR). We compiled a database consisting of 1,284 articles citing the ten most cited articles in BH and BHR. We categorized each of these citations in terms of *tone* (critical, supportive, neutral) and *focus* (method/data, theory/concept, substance/case). Thereafter we performed a statistical analysis to ascertain what kinds of articles are more likely to be cited both in business history research and within the neighbouring disciplines. Moreover, we performed similar analysis with a random sample of articles published both in BH and BHR. To provide a comparative perspective, we also analysed major economic history journals (i.e., *Journal of Economic History* and *Economic History Review*) in order to see whether business history has developed same way or differently compared to a neighbouring field.

Our research highlights the methodological and analytical trends and differences in recent business history scholarship, which we see as a valuable exercise in the post-Chandlerian research environment. Our goal is to engage in the current methodological debate within business history (recently, for example, de Jong, Higgins, and van Driel, 2015 and 2016; Eloranta, Ojala, and Valtonen, 2010a), and to examine further the possibility of diverging research agendas, scientific culture, and foci between European and North American scholars. We also hope that the findings of this article might help to further increase the impact of business history research.

In the following, we will first briefly review earlier bibliometric analyses in general and those conducted in business history in particular. In section 3 we describe our research setting, followed by a content analysis. In section 5 we analyse further the focus and type of citations to business history research, followed by a quantitative analysis in section 6. Section 7 concludes and discusses the prospects for future research.

2. Bibliometric analysis

In the past few years, numerous bibliometric studies have been conducted in order to analyse citation impacts in various fields. One reason for this is the growing financial and academic interest in databases such as Web of Science, Scopus, and Google Scholar, as well as the relatively easy use and coverage of these datasets. Web of Science was used as the major source for the sample in this study. In most cases the bibliometric analyses have concentrated on readily measurable quantitative qualifiers, such as number of citations, article length, and the number of authors (Judge

and al., 2007; Di Vaio, Waldenström, and Weisdorf, 2012). Only rarely have the contents of the articles been analysed in greater detail in an attempt to ascertain what qualities make an article useful or important enough to be cited (see also Stremersch, Verniers, and Verhoef, 2007).

Bibliometric studies can be roughly divided into two categories. First, they can be situated within the research that analyses the contributions in a given field, using various quantitative tools like analyses of the determinants of citations or network analysis, in order to gauge what has been done in this field in the past and what the dominant research trends are going to be in the future. Second, they can be seen as studies using similar tools, but aiming at certain normative and policy goals, especially in order to determine the evaluation of research and related funding (Abramo, Angelo, and Caprasecca, 2009; Davis and Carden, 1998; Huang and Chang, 2008).

Comprehensive bibliometric analyses of business history research are scarce. Yet for example, Eloranta et al. (2010a) evaluated how often quantitative tools and methods were used in *Business History Review* and *Business History* in the 1990s. They found that the interdisciplinary appeal of articles increased when quantitative methods were used in conjunction with a specific theoretical framework, thus suggesting that this approach expanded the discourse over disciplinary boundaries. De Jong et al. (2015, 9), in turn, show that the majority of business historical studies are still descriptive case histories, which to a certain extent define the concepts and create links to existing research, but have difficulties in defining the methods and theories used in the study, and hence do not usually build new theory. De Jong et al. (2016), in turn, made a citation analysis of business history and related disciplines. Their work complements our study by also including book citations and *Enterprise & Society* as a journal in their analysis. However, their approach is more to show which business history publications were cited and where, while our intention is also to analyse in greater detail in which contexts and why business history articles were cited in the first place. Moreover, they also focus on which articles published in other journals by business historians tend to refer to. Lamoreaux et al. (2008) in their bibliometric study show that economic theories and methods are rarely used in the articles published in the US business history journals *Business History Review* and *Business and Economic History*, but more often in the UK-based *Business History*. Lack of economic theory in the articles may in turn have decreased the opportunities for more citations in economics and economic history. This situation, however, has changed in recent years as more theory driven articles and articles using quantitative methods have been published in business history journals. In *Business History*, for example, 29 articles published in the period 2012 – 2017 (by May 28, 2017) used regression analysis or other quantitative methods – like Colli and Vasta (2015), who used network analysis to show the persistence of business groups in the Italian economy. Thus, articles using these quantitative methods accounted for up to ten per cent of all articles published in *Business History* during the past five and a half years. There are slightly more citations than average to articles using quantitative methods in this period; however, using quantitative methods is not necessarily the reason why these 29 articles have gained citations.

Bibliometric databases as such do face many source critical challenges, but they are still able to answer some of the key issues in any given discipline, as scientific knowledge is created first and foremost through critical academic discussion (Andrew et al., 2009). Some scholars have also criticized referential chains (or clusters, see e.g. Franceschet, 2009; Jarwal, Brion, and King, 2009), for being basically analysed by citation counts, claiming that they are not easily compatible with

disciplines such as history in which the knowledge is typically created through archival sources rather than by referring to scholarly sources (Kelly et al., 2009). For academics to get their work published is an achievement in its own right. However, that is not enough; the texts should inspire discussion in order to contribute to the creation of further knowledge. Therefore, it makes sense to study citations in business history too.

Much of the existing literature is quite critical of citation counts in general, and particularly of using the WoS (e.g. Kelly et al., 2009), thus we do not need to go deeper into this general discussion. However, we would like to highlight certain observations for this particular paper. Namely, in the field of business history especially, the WoS database does not necessarily reveal the “reality” of the importance of the field as such. For example, analysis with Google Scholar (Harzing and van der Wal, 2009; Rosenstreich and Wooliscroft, 2009) might produce rather different outcomes, especially as some (business) historians tend to publish their research in monographs and edited volumes rather than in international journals (Eloranta et al., 2010a; Zuccala et al., 2015).

<INSERT FIGURE 1 ROUGHLY HERE>

Moreover, Scopus might deliver results different from those delivered by Web of Science. Indeed, using Source Normalized Impact per Paper (SNIP)³ by Scopus, one can trace the development of business history journals in comparison with neighbouring fields. Figure 1 reveals an interesting trend: the SNIP impact of the major business and economic history journals was at about the same level around the turn of the millennium. During the early 2000s, the impact of business history journals decreased when compared to economic history journals. The impact of economic history journals, in turn, increased significantly from 2005 to 2010. According to this metric, both *Business History Review* and *Business History* have advanced their impact significantly during the past ten years or so when compared to the major economic history journals, although their SNIP impact is still lower than those of the *Journal of Economic History* and *Economic History Review*. Thus, these comparisons prompt the question why business history as a discipline has lagged behind, although recently catching up with economic history research. What factors explain these citation patterns?

Research setting

To understand “the philosophy” (i.e., why other scholars cite certain papers more than others) behind the citations at a deeper level, we analysed the references to the all-time ten most cited *Business History* (BH) and *Business History Review* (BHR) articles. As in BH the two last articles had the same number of citations (25), we chose them both for analysis – thus, we have altogether 11 articles analysed in the case of *Business History*, 10 for *Business History Review*, and 21 articles in total. The data was compiled on June 1, 2015, therefore, the number of citations and even the rankings of articles have changed thereafter. We compiled the basic data using the Thomson Reuters Web of Science database (WoS). We conducted a longitudinal analysis by referring to an earlier study making a similar kind of analysis of business history articles based on WoS texts

³ SNIP measures actual citations received relative to citations expected for the serial’s subject field. Thus, it corrects the citation practices between different fields. SNIP indices for different journals can be found at <https://journalmetrics.scopus.com/> (cited here on April 28, 2017).

from 2010 (Eloranta et al., 2010b) – and also compiled data from 2016 (November) to see whether there were changes in the top-10 cited articles in BH and BHR during the period from 2010 to 2016. (Appendix Tables 1 and 2)

Therefore, we took the following steps in our analysis:

1. We identified the most cited articles in BH and BHR from WoS.
2. We isolated all articles citing the aforementioned articles from WoS (N=1,284).
3. We compiled the data containing the information from step 2 above, obtained from the WoS, in a database, including 1,056⁴ articles published in 314 different journals (Table 1).
4. We categorized the journals citing business history articles into nine main fields (Table 2) by using the WoS categories⁵.
5. We identified and included in the database the exact position of each citation in the article in question. This increased the number of cases, as in one article there might be several citations to the same article.⁶ Thus, the total number of cases increased to 1,610, for which we have information on 1,488 cases, as there were mistakes in sources, or we did not have access to all articles (Table 1).
6. We categorized the citations in terms of *focus* (whether they were citing to method/data, theory/concepts, or substance/case within the original business history article). As this categorization is subjective, we had four different individuals to do the categorization (one business history professor, one senior researcher, one doctoral student, and one Master's student). Based on the individual categorizations or “votes” given by these four, we made the final categorization as follows: votes for each category were summarized and thereafter these sums of votes were calculated as percentage of the maximum possible number of votes (5,952 in total⁷). These percentages were then taken to be the share of each category (Table 3).
7. We further categorized the citations in terms of *tone* (critical, supportive, neutral) as in step 6 above (Table 4).
8. We constructed descriptive tables based on the results of the categorizations in steps 4, 6, and 7 above (Tables 2-4).
9. We performed regression analyses to further cross-check the relationships between the variables, and also to ascertain the probability of citation e.g. in different fields with different scopes in the articles (theoretical, methodological etc.).

⁴ The Web of Science search yielded a total of 1,284 articles citing these 21 articles; however, from the database we compiled, we found only 1,056 articles – thus, 16 per cent of cases are missing, as we did not, for example, have access to all the articles or the journals were not included in the WoS at the time. Nevertheless, our sample is large and quite representative of the trends in the field.

⁵ Among Web of Science Categories, business history journals, for example, are ranked in the category “Business; History of Social Sciences”, whereas economic history journals are included in several categories, namely: “Economics; History; History Of Social Sciences”, “Economics; History Of Social Sciences” and “Economics; history”. The WoS categories, however, did not appear in the dataset in 2015 – thus, we had to make the categorization manually.

⁶ The Web of Science counts same reference only once from a single source, even if there are duplicate cites.

⁷ The total number was calculated as follows: 1,488 (number of known citations) x 4 (number of “voters”) = 5,952. In the case of BH, these figures were: 493 x 4 = 1,972, and for BHR: 995 x 4 = 3,980.

10. We also analysed the results of the descriptive and quantitative analyses further in a reiterative manner, and certain illustrative cases arising from the citation analysis were discussed throughout the paper.

Our analysis was diligent and laborious which, we hope, will ensure the reliability of our findings. Nevertheless, our analysis also has obvious weaknesses. First, even though we ran a pilot study to develop the categories before the voting, the categories were nevertheless determined beforehand. During the categorization process, a number of new categories might have been included, but as the four “voters” were working independently that was not possible. Second, even four “voters” might not be enough due to the subjectivity of their categorizations. Indeed, votes were equal in 46 per cent of cases in *focus* categories, whereas in *tone* categories there was less diversity in votes as the votes were equal in 73 per cent of cases. The diversity in *focus* categories may be due not only to subjectivity, but it may also reflect an unclear research setting.

Moreover, in order to verify our results, we created a random sample of articles published in BH and BHR (ten each)⁸, and compiled similar data on articles citing them (N=58). Similarly, we analysed the top-10 most cited economic history articles from the *Economic History Review* (EHR) and the *Journal of Economic History* (JEH), and also performed similar analyses on the articles citing them (N=4,026). However, both for the random sample and the economic history journals, we did not engage in the time-consuming classification strategy (*tone* and *focus*) used elsewhere in this article; thus only steps 1–4 were performed for the comparative data. The comparative data (random sample and economic history top-10s) were compiled in April 2017 – roughly two years after the main dataset was completed. This may have influenced the results, as the overall number of citations has increased significantly in recent years, which is something we discuss further below.

3. Content analysis

The basic information pertaining to the Web of Science data on the business history journals is compiled in Table 1. We can already make a couple of interesting and important deductions from this descriptive table. In the dataset, *Business History Review* has twice the number of journals, three times more articles, and twice the number of citations compared to *Business History*. This can also be seen in the fact that there were eight times more citations to articles citing the BHR, thus reflecting the wider discussions among the topics. (citation-chains in Table 1) This in turn, suggests that BHR is more often cited by authors writing on neighbouring fields (Table 2). This may be attributable to different publishing traditions in the USA and in Europe, and likewise to the fact that WoS covers published matter better in the USA. The large number of citation-chains, however, does not necessarily have anything to do with the articles originally published in BH and BHR. The number of citations to the random sample of business history articles is lower than to the top-cited articles, although many of the attributes are similar to the overall dataset. The top-cited articles in the major economic history journals, in turn, have roughly three times more citations and journals citing them than the business history journals. This reflects the fact that economic history is larger as a field than business history. This is also verified by the fact that the

⁸ We excluded the most cited articles from the base data in the random sample, as well as those that were not cited at all.

difference between these neighbouring fields is not as large when using the *Source Normalized Impact per Paper* (Figure 1). Interestingly, the same difference between US- and UK-based journals can also be seen in the economic history journals: The US-based *Journal of Economic History* (JEH) has about three times more citations and journals citing it than the UK-based *Economic History Review* (EHR). Similarly, the number of citation-chains was about six times greater in articles citing JEH than in those citing EHR – again, this suggests that there are differences in the academic practices and discourses in Europe and the USA.

<INSERT TABLE 1 ROUGHLY HERE>

When compared to an earlier study by Eloranta et al. (2010b) on citations to BH and BHR, the total number of citations and also citations to the top-10 most cited articles increased substantially only in the last five to six years. The total number of citations to BH articles was 2,081 and to BHR 3,251 in 2010, whereas these numbers were 5,329 and 6,807 respectively in 2016 (November). Thus, the total number of citations tripled in the case of BH and doubled for BHR in the period 2010-2016. This growth rate is in line with the overall development of the WoS, but significantly higher than for the major economic history journals⁹. In 2010, the top ten articles in *Business History* were cited in 171 articles and those in *Business History Review* were cited by 570 articles. Thus, the average number of citations to top-10 articles grew from 17 to 34¹⁰ in the case of BH, and from 57 to 91 in the case of BHR. This may reflect certain changes in academia as a whole, such that more publications are produced overall – and that also more content is included in the WoS database. This trend has continued: In 2016 (November), *Business History* already had 419 citations to top-ten cited articles, and *Business History Review* had 996. Therefore, the increase was especially particularly significant in the case of *Business History*: the number of citations to top ten articles doubled from 2010 to 2015 and increased by a further 25 per cent from 2015 to 2016. With *Business History Review*, the development was more modest, but still noteworthy: first a 60 per cent increase from 2010 to 2015, and then a nine per cent growth from 2015 to 2016.

Interestingly, there were more changes in articles included in the top ten in *Business History* than in *Business History Review*. Namely, in the case of *Business History* only five articles from the top-10 list made it to the top-11 list in 2015, and from 2015 seven to the top-10 in 2016. Similarly, in the case of *Business History Review*, only five articles were the same in the top-ten list for 2015 compared to that of 2010, but nine out of ten were the same in 2016 and 2015. The majority of the articles that were newcomers to the BH top-11 list in 2015, compared to 2010, were published during the 2000s, while in the case of BHR all the new articles were published before the turn of the millennium. This is an interesting piece of information as it suggests that the European business history discussion is concentrating more on the most recent publications, whereas in the US the situation is somewhat different. Some articles remained among the top cited ones throughout the period: in the case of *Business History*, only one article remained among the top-3 most cited in 2010, 2015, and 2016, namely article by Mira Wilkins (1992) on trademarks. In *Business History Review*, in turn, two articles made it to the top-3 list of the most cited articles in all three years, namely the widely cited article by Cusumano, Mylonadis and Rosenbloom (1992) on the competition between VHS and Beta video recording standards, and Louis Galambos's (1970) classic study on organizational synthesis.

⁹ The combined total number of citations to articles published in the *Journal of Economic History* and *Economic History Review* increased in 2010 to 2016 from 2,213 to 2,448 (Web of Science, cited in February 6, 2017).

¹⁰ This figure includes top-11 articles.

<INSERT FIGURE 2 ROUGHLY HERE>

The average time lag between the published article and the citing article is 15 years. (Table 1, Figure 2) This is an important piece of information, as citation impact factors are usually based only on citations created recently (usually two to five years after publication). This type of impact factor might fit the natural and social sciences in general but, according to our analysis, is far from perfect in the case of history studies. This can also be discerned from Figure 2: In the business history journals, the bulk of the citations came between four and 20 years after publication. This is related to the fact that (business) historians cite in accordance with their training vis-à-vis the *relevant* literature, not only by referencing the most *recent* literature, as is the case in many other fields. Thus, this is also a major reason why (business) history journals do not fare particularly well in the comparative citation counts. The situation becomes even more pronounced with major economic history journals having an average time lag from publication to citations of about 19 years. With the random sample of business history articles, this time lag was lower, although still almost ten years. This reflects the fact that in both business and economic history journals the most cited articles tend to be “classics” that still gain citations even decades after their publication.

The average time lag between the published item and citation is somewhat higher for BHR than for BH. Figure 2 also verifies the trend that the American discourse tends to refer to older research than the European research does. Moreover, the size of the market (total number of citations) might have influenced this trend. With the random sample of business history articles, the difference in the time lag between BH and BHR was not as significant, although slightly longer in the case of BHR. The longest time lag between publishing and citation was 55 years with Edith Penrose’s (1960) still widely cited article on the growth of the firm published in *Business History Review*. The Penrose article is also an illustrative case of the interplay between the book and the article formats. Namely, the article was originally intended to be published in her classic book *The Theory of the Growth of the Firm* (1959), which is today understood as one of the benchmark studies of the resource-based view. However, the article was not included to the book due to space constraints, even though it provides a case study illustrating the arguments of the book. This story between the book and the article is also mentioned time and again in articles citing Penrose’s BHR article (e.g. in Rouse and Daellenbach, 1999; Jones and Khanna, 2006; Kor and Mahoney, 2000). The importance of the book format in business history and also in management studies can be observed by noting that Penrose’s 1959 book received over 26,000 and the 1960 article only around 300 citations in Google Scholar (November 25, 2016). In Web of Science, the number of citations to the article is even lower: In 2016, the citation count was 81¹¹. With economic history journals, the difference in the time lag between publication and citation was even more striking: with the JEH, the lag was 21 years, but “only” 12 years for the EHR. This can be explained by the fact that in practice all of the top-ten most cited articles in the JEH can be considered as classics in the field. Two of the most cited ones are illustrative cases: Douglass C. North’s and Barry R. Weingast’s (1989) article on English seventeenth-century institutions and Moses Abramovitz’s (1986) article comparing economic growth in different countries. As in the BH, in the EHR, too, the discussion tends to concentrate on the more recent literature than it does in their US counterparts, BHR and JEH. Thus, one might suggest that in Europe both business and economic history research operates

¹¹ Information collected from these databases on November 23, 2016.

at least in these selected outlets closer to the frontier, while American journals in both fields have attracted studies that later became classics.

The shortest time lag in business history journals between publication and citation was actually minus one year, as William Mass (1989) referred to his forthcoming article (Mass and Lazonick 1990). Similarly, the two articles that were able to reference a published article during its publication year were actually self-citations (Hannah 2007a, b; Froud and Williams 2007; Folkman, Froud, Johal and Williams, 2007). This makes total sense as the current practice of publishing articles on a journal's website before the print version only became typical during the latter part of the first decade of the third millennium. Similarly, Internet-based working paper series have gained broader appeal only during the past decade or so¹². Thus, unlike today, only the authors themselves were familiar with their forthcoming research, unless the conference papers are considered.

The major finding in the analysis of the fields of journals citing business history research is that *Business History* garnered most of its citations in the business history journals, while the vast majority of the citations to *Business History Review* were in business and management journals. (Table 2) This may reflect the differences in the published content matter, which may have rendered the BHR articles more appealing to the neighbouring disciplines. In fact, 41 per cent of the top-11 citations to *Business History* were in articles published in BH itself, whereas only four per cent of the *Business History Review* top-10 citations were in articles published in BHR. This is mainly because the number of articles published per year increased significantly in the case of *Business History* during the past decade, whereas there has been no similar development in *Business History Review*. Thus, there have been more opportunities in BH than in BHR to cite the content matter in the journal itself. In the random sample of business history articles, however, the internal discourse among the business history journals became more pronounced – also in the case of BHR, as roughly a third of the citations were from other business history journals. This suggests that, indeed, the way to achieve substantial citation counts to content published in business history journals is to be appealing to other fields as well. This is seen in the fact that only *three* business history journals are included in the WoS (Enterprise & Society besides BH and BHR), while the number of business and management journals is over 200 (Table 2). This ultimately leads to low intra-field impact (de Jong, Higgins, and van Driel, 2016). The other way to increase the citation impact of business history content might be the introduction of dozens of new journals in the field, which is highly unlikely to happen.

The overall share of business history journals citing both BH and BHR shows that the discipline does have discussions within itself, but as the field is quite small and diverse the overall number of citations has remained low (Friedman and Jones, 2011). Besides *Business History*, *Economic History Review* and *Business History Review* are also among the top journals citing *Business History*, whereas in the case of the *Business History Review* the top journals citing it are not history journals: namely, the top-3 include *Research Policy*, *Strategic Management Journal*, and *Industrial and Corporate Change*. This analysis may suggest that business history as a discipline

¹² Social Science Research Network (SSRN, <https://www.ssrn.com/en/>) and Research Papers in Economics (RePEc, <http://repec.org/>) in general, and nep-his (<http://nep.repec.org/nep-his.html>) in particular, are important new avenues for scholars to deliver the most recent business, economic, and financial history working scholarship. Nep-his was, in fact, already created by Bernardo Bátiz-Lazo in 1998.

is part of a broader, perhaps interdisciplinary academic discourse in the US than is the case in Europe. The most cited business history articles in other business history journals include Hannah's (2007) study on 20th century ownership and control in business, the analysis by Folkman et al. (2007a) of capital market intermediates, and the much discussed article by Broadberry and Crafts (1996) on economic policy and industrial performance.

<INSERT TABLE 2 ROUGHLY HERE>

The number of different business and management journals citing business history journals is 105; thus considerably higher than the number of journals in other fields. (Table 2) This number on the one hand tells about the size of the market in management studies, but on the other hand also about the broad interest in this field towards business history. This may therefore suggest that to a certain extent the "historic turn" in organization studies has indeed occurred in the USA, but not so much in Europe. According to our study, the journals containing the most frequent citations to business history journals among management and organization studies are *Strategic Management Journal*, *Industrial and Corporate Change*, and *Journal of Management Studies*. The most cited business history articles among management and organizational studies are Cusumano et al. (1992), Christensen (1993), and Langlois (1992). Interestingly, all three were published around the same time in the *Business History Review*, and address the issue of technological change. They are also widely cited in journals of other fields, as we will discuss further below. The most cited *Business History* article in management journals is that by Clark and Rowlinson (2004) on the historical turn in organizational studies.

Interestingly, historians and economic historians have a low representative share of the citations to the most cited business history journals. The main reason for this might be simply the small number of journals and issues published per year in these fields, as also seen in Table 2. Moreover, the random sample of articles published in business history journals got relatively more citations in history and economic history journals (40 per cent from all citations) – however, the absolute volumes are quite low (only 23 citations in total). Thus, the alienation between economic and business history has perhaps occurred more among the top-cited articles, but perhaps not that much in these fields as a whole. Moreover, roughly three-fourths of citations to random sample articles came from history as a whole (including business history, economic history and history); this suggests that to be highly cited, the article should also appeal to other history disciplines.

Yet again, there are clear differences between the journals in the case of the most cited articles. Namely, scholars who published their research in business and economic history journals were more likely to cite *Business History*, while for *Business History Review* more citations were gained in the more "general" history journals. One author dominates the citations within these general history journals: Louis Galambos (1970, 1983) gained 63 out of a total of 77 citations among the top cited ones with his two articles on organizational synthesis. There is a wide range of history journals citing business history content with a fairly equal share, though the most citations can be found in the *Journal of American History*.

Economic history seems to have a closer relationship with the business history community in Europe than in the US (Eloranta, Ojala, and Valtonen, 2010a). This can be seen, for example, in the fact that a number of European economic historians have also published their research in *Business History*, among them Stephen Broadberry and Nick Crafts. Broadberry and Crafts (1996)

is also among the most cited in the economic history journals, together with Hannah (2007), and the article by Mass and Lazonick (1990) on debates over the decline of the British cotton industry. The line between economic and business history is more demarcated in the US. Economic history in the US (in the form of cliometrics) is undeniably more dominated by authors from economics than by historians (di Vaio, Walderström and Weisdorf, 2012). The cliometric turn may also have alienated business historians from economic history, as suggested by de Jong and al. (2015) and Popp (2009). The domination of economists has even caused fear among the more historically-oriented scholars that economic history will transform from a distinct academic discipline into a sub-field of economics (Romer, 1994). In the case of *Business History Review*, the top-10 most cited articles were cited only 16 times in economic history journals; of those, ten citations were to Baskin's (1988) article comparing the development of the British and the US financial markets over a long period of time. According to Friedman and Jones (2011), business historians do not engage in the broader economic history discussions; this may explain why business historians do not get citations from economic historians either. Indeed, business historians only seldom cite content in economic history journals. The ten most cited articles published in the EHR gained only nine citations in business history journals, whilst the number for the JEH was 31 respectively. In total, though, in both economic history journals the citations from business history journals amounted to only about one per cent of all citations. The majority of citations to the EHR were garnered from other economic history or history journals, whereas the JEH top-cited articles tended to be more appealing to economics and a wide variety of journals in different fields of natural and social sciences. Again, the pattern is somewhat similar to that in the BH and BHR: The US journals seemed to benefit from readership beyond the distinct academic borders and niches.

The number of different journals in economics citing business history journals is also quite high, although the overall share of all citations is below ten per cent. The journals in economics with the most citations in this vein are *Journal of Evolutionary Economics*, *Rand Journal of Economics*, and *Journal of Economic Geography*. Again, Cusumano et al. (1992) and Christensen (1993) are the most cited articles, but Baskin's (1988) study on the long-term evolution of financial markets, Helper's (1991) study on industry-supplier relations on the US automobile industry, and Leslie Hannah's (1974, 2007) studies on takeovers and the divorce of ownership and control have also appealed researchers publishing in economics journals.

Authors publishing in social science journals tend to cite *Business History Review* more often than *Business History*. The citation counts per journal, however, are quite low – even the journals having the most of the citations, namely *Current Sociology* and *Theory and Society*, have both only seven citations each to the most cited articles published in business history journals. Furthermore, in social sciences Galambos (1970, 1983) is clearly the most cited author, followed by Folkman et al. (2007). *Business History Review* has also gained citations from more general science and research journals. *Research Policy* is the leading journal in this category. The vast majority of the *Research Policy* articles cite technology-oriented articles published in *Business History Review*, especially Galambos and Sturchio (1998) on biotechnology, together with Cusumano et al. (1992) and Christensen (1993). The study by Cusumano et al. (1992), along with Langlois (1992) on the microcomputer industry, also commanded interest among the technology-oriented journals in the fields of the computer science and engineering. Of the technology journals, *Technological Forecasting and Social Change* in particular was interested in business history content. Even some research published in law journals cited business history research. The work

on the organizational synthesis by Galambos (1970, 1983), the trademark study by Wilkins' (1992), and Baskin's (1988) analysis of corporate financial markets in Britain and the US seemed to be of interest to journals such as *Vanderbilt Law Review*. The most cited articles may, however, be exceptional cases as the random sample of business history articles did not get any citations whatsoever either in technology-oriented or law journals; furthermore, even the share and absolute number of citations in social science journals was low.

The number of citation-chains to articles citing business history journals is, obviously, higher than the citations gained by the business history journals themselves. Namely, 75 articles citing top-cited business history articles gained more than 100 citations. The highest number of citations, over one thousand, was achieved by MacDuffie (1995) for an article on human resources and manufacturing practices in automotive assembly plants published in *Industrial and Labor Relations Review*, citing Helper's (1991) article on supplier relations in the US car manufacturing industry. This article thus gained over 15 times more citations than the *Business History Review* article it cited. MacDuffie's article is typical in that roughly two thirds of the citation-chains were gained from business and management journals. Again, there is a clear difference between the journals we analysed: 73 per cent of the citation-chains to the top-cited articles in *Business History Review* were garnered from the business and management journals, whereas the share for *Business History* was around one fifth, as more citation-chains were gained in the case of BH from articles published in other business history journals.

4. Focus and tone of citations

In the following, we will embark on a more detailed analysis of the citations to the said business history journals. We first concentrate on better discerning the *focus* and *tone* of citations (Tables 3 and 4), and then perform a regression analysis to get a better sense of when, how, and why business history journals get citations in the first place.

<INSERT TABLE 3 ROUGHLY HERE>

Business history research is often criticized and deplored for its case study orientation. An analysis by de Jong et al. (2015) showed that up to 80 per cent of published business history articles are in fact case studies. Indeed, in-depth business history case studies have provided examples for various fields to test and examine hypotheses and theories, as suggested, for example, by Gibbert et al. (2008) (see also Perchard, MacKenzie, Decker & Favero, 2017). Our results do indeed confirm that substance matter – most often case-based - is important when citing business history research: Both in *Business History* and *Business History Review* almost 60 per cent of all citations concentrated on the substance or the novel findings presented in the article (Table 3). However, the overall picture is not necessarily as clear: the descriptive Table 3 shows that theoretical and conceptual findings in business history articles were more important than substance matter in attracting citations. Thus, our analysis shows that business history articles are also – or at least those that were cited – theoretical by nature. There is a small but perhaps important difference between the journals: BHR got slightly more citations to theories and concepts than BH. This, again, may reflect the fact that BHR articles were more often cited by the neighbouring fields.

Concentration on case studies or nationally important subjects does not, however, necessarily predict lower citation impact or less interest among scholars from other disciplines. Helper's (1991) article published in *Business History Review* is a good example of this. His essay titled 'Strategy and Irreversibility in Supplier Relations: The Case of the United States Automobile Industry' also gained citations in journals other than business, history, economics, or management journals. Their fields of expertise range from computer science and engineering to environmental studies and geography and from law to political science and social sciences. Many of these publications represent cross-disciplinary, multidisciplinary or interdisciplinary fields of research. However, Helper is not only cited due to the nature of the case study, but also because of the novel theory proposed in the article.

Method and data were less often referred to in the citations – although more often in the case of BH than of BHR. This, in turn, is related to one discussion especially, namely the Broadberry and Crafts (1996) controversy. In essence, Broadberry and Crafts showed in their article in *Business History* that productivity growth in Britain was slower in industries with restrictive agreements than in competitive industries from the mid-1950s to the early 1960s. Most of the authors citing this article agree with the conclusions, but disagree with the data and quantitative methods used (especially Tomlinson and Tiratsoo, 1998; Symeonidis, 2008) or disagree with their starting point emphasizing economic rather than socio-cultural explanations (Boyns, 1998).

<INSERT TABLE 4 ROUGHLY HERE>

A vast majority of the citations in our database were neutral or supportive in nature, as can be seen in Table 4. Thus, the notion that controversial articles induce citations does not get support from our analysis. As Friedman and Jones (2011) have argued, business historians are not eager to argue against each other or to engage in open debate, which differentiates them, for example, from many economic historians. Interestingly, BH gained both more supportive and critical citations. The critical citations, again, reflect especially the Broadberry and Crafts (1996) debate and also the criticism that Hannah (2007) received for his article on the separation of ownership and control in 20th century business. Cheffins and Bank (2009), for example, criticized the US data and companies used by Hannah – and even Hannah himself together with James Foreman-Peck has lately criticized the representativeness of the data he used in his article. (Foreman-Peck and Hannah, 2012)

There seemed to be no particular change over time neither in terms of the focus or of the tone of the citations. Namely, the vast majority (over 80 per cent) of citations remained neutral throughout the decades from the 1960s to 2000s, and the theoretical and substance matter together dominated the focus of the citations with an over 90 per cent share, regardless of which decade we are looking at. Nevertheless, the descriptive tables above do not necessarily answer the major questions posed in this article; namely, why, when, and how business history research is cited. Therefore, in order to learn more about the focus and tone of the citation we performed relatively simple regression analyses.

5. Quantitative analysis of citations

We initially examined the impact of time on citations. First of all, we tested (using OLS regressions), whether the gap between the initial publication and the article that cited it was connected with our explanatory variables (Group 1: theory, method, substance; Group 2: whether the article was supportive, critical, or neutral). With the gap as the dependent variable, we found that only theory had a statistically significant positive impact on it, thus it is possible that theoretically oriented articles would be more likely to be cited over time. Of course, this had to be checked using other evidence, especially given that the adjusted R-squared values were extremely low (below 0.02 for each regression). We then divided the database into three distinct time periods, with articles published: 1) before 1990; 2) between 1990 and 1999; and 3) from 2000 onward. Testing the impact of Group 1 variables on each period (=Model 1), using Probit regressions (since the dependent variable was a dummy, either 0 or 1), we found that for the period before 1990 use of theory had a slight positive impact while focus on substance had a slight negative, and statistically significant, impact on the citation counts. For the 1990s, focus on methodology had a negative impact and substance had a positive effect on the citation counts. Thus, for the period since 2000, focus on methods had a positive and use of theory had a negative impact on citations. Therefore, the areas of focus and preference have changed over time. Similarly, we tested these periods regarding the nature of citations (Group 2 = Model 2). Before 1990, only critical citations were statistically significant, with a negative impact. For the 1990s, only neutral citations were statistically significant, with a positive impact on citation. And, finally, after 2000, only critical citations were statistically significant, this time with a positive impact. Thus, critical discussion has increased according to this analysis, although the overall explanatory power of the regressions (pseudo R-squared) was low. So, similar to Group 1, the impacts of Group 2 variables changed over time (see Table 5 for details).

<INSERT TABLE 5 ROUGHLY HERE>

We also tested the impact of both groups of variables in each sub-field, with the gap between publication of the original article and the citation as a new control variable, and the results are listed in Tables 6 and 7. For business history, a focus on methods was positively correlated with the number of citations. Moreover, in another field that is close to business history, i.e. economic history, theory had a negative impact and substance a positive impact. Conversely, in economics, the only factor that (positively) influenced the citations was that the citation was neutral in nature. In history articles, methods, substance, and the critical nature of the citation all had a negative correlation with the citation counts. In the field of law, methods and theory had a negative impact on citations. In management, focus on methods had a positive impact and critique a negative impact. Other social sciences showed a similar pattern. And, finally, in technologically oriented journals both use of theory and focus on substance increased citation counts. However, we need to interpret these results with caution since the explanatory power of the regressions was again low, implying that there are likely many missing variables.

<INSERT TABLES 6 & 7 ROUGHLY HERE>

We also examined the robustness of the results using a stepwise regression, i.e. one in which we added the independent variables one by one into the regression, and then determined which ones were statistically relevant. The results are listed in Table 8. With total citations as our dependent variable, for the whole period, theory had a positive impact and critical nature of citations a

negative impact. These results, however, were not static over time. Before 1990, none of the variables had a statistically significant impact, whereas this changed in the 1990s as both theory and substance focus increased citations and critical citations decreased them. Since 2000, focus on methods and supportive tone increased citations, whereas neutral tone decreased them.

<INSERT TABLE 8 ROUGHLY HERE>

Our next step involved separating the results for *Business History* and *Business History Review*, and replicating the stepwise regressions (see Tables 9 and 10). For the entire period, in the case of *Business History Review* (Table 9), theory and substance had a sizeable positive impact on citations, and critical tone a sizeable negative one. The results were quite different for *Business History* (Table 10) – theory, substance and neutral tone had a negative impact on citation counts, although the coefficients were smaller. Clearly there were differences between the journals. Furthermore, we wanted to better discern the changes over time, using the time-period dummies to limit the sample to samples pre-1980, 1990s, and post 2000, and in addition we wanted to investigate the time periods for each journal, using both Group 1 and Group 2 variables. In the case of BHR, the results remained fairly consistent over time. For BH, the results varied a bit more – for example, the focus on methods was clearly linked to higher citation counts in the post-2000 period – although the changes were fairly minor. In all these estimations, the adjusted R-squared values were very low, suggesting that we are clearly missing some key variables in order to explain the citation behaviour comprehensively.

<INSERT TABLES 9 & 10 ROUGHLY HERE>

These results complement the findings in the descriptive tables above. Namely, it seems that theoretical papers do indeed get more citations, methods do matter (especially in the most recent debates), and substance is overwhelmingly important to get the citations in the first place. It is quite obvious that the criticism of methods and theories were discussed when fresh in the journals of the author's own field, whereas other fields might later participate in these discussions. Moreover, critical tone is clearly more linked to discussions within the field itself as obviously other disciplines are not interested in embarking on in-depth specific discussions over, for example, historical methods, theories, or the use of data, thus leading lower citation counts. These findings seem to suggest that broader, interdisciplinary approaches and topics lead to citations from other fields.

6. Discussion and conclusions

This study shows that there has been a substantial increase in citations to business history articles both within the discipline itself, and also by scholars from other fields. Digitalization and easy access to business history journals have increased the citations in neighbouring fields. This may also have increased interest in the methods and theories presented in business history journals; thus, scholars are not only referring to interesting cases and subject matter. History methods as such have recently been widely applied for example in management studies; although one might argue that management studies hardly have their own methodologies but are – in turn – borrowing methods from neighbouring disciplines as well (especially from sociology and economics).

According to this study, it is not only case studies that researchers are seeking for from the business history journals. Theoretical and conceptual novelty is the way to get the article cited even if it is published in a business history journal – even though interesting cases do still matter. Controversial arguments or novel methods (criticized by others) may increase the citation count, but not really very much. The most important way to get citations is to write on topics and use theories – or, more recently, discuss engage in methodological debates - that have appeal beyond the business history community. This is because business history as a discipline is too small and diverse on its own to generate citation impact to compete with large fields such as business and management studies. The theoretical discussions today are still concentrated among a small circle of business historians themselves, with only a handful of active scholars from the neighbouring disciplines. Authors like Zeitlin have urged business historians to focus on theories and social problems instead of writing history; thus the history of businesses as such is not rationale enough to write business history (Zeitlin 2003, Kobrak and Schneider 2011).

Moreover, certain technical issues might also explain the low citation impacts; namely, the historians' tendency to use foot- or endnotes with the exact information on pages cited, rather than in-text citations without this specific information, may lower the number of citations, and thus impact. As such, in-text citations might encourage authors to increase the number of works cited. The late transfer to web format by history journals (including back issues) may also be one reason for the low citation impacts.

Our study shows that in about 80 per cent of the cases the citations were neutral by nature, as both critical and supportive ones were rare. The scholars citing business history articles often considered the field of business history as providing complementary information to their own, or at least that they wanted to provide an acknowledgement of the empirical and theoretical work done by business historians. In terms of the scope of the journals having citations to articles in these two journals, we found that history-related journals seem to dominate the citations for *Business History*, while in the case of *Business History Review* the scope is more diverse and interdisciplinary.

Both of the journals we analyzed here reflect the changes in the business history discipline both in their home country but also at a more general level. This can also be gauged via the most cited articles in both journals. In short, in *Business History* there were more papers on subjects often representing themes important for British business history (Broadberry and Crafts, 1996; Hannah, 1974; Mass and Lazonick, 1990), while *Business History Review* favoured subjects of global interest, such as lines of business and technological changes (Christensen, 1993; Cusumano, Mylonadis, and Rosenbloom, 1992; Langlois, 1992). This state of affairs may, up to a point, explain why articles published in *Business History Review* got more citations in a wider range of journals and articles, as our analysis shows. However, the focus of the articles in *Business History* – at least in the most cited ones – has moved towards international comparisons and to more conceptual and theoretical ones, as our longitudinal analysis proved. Finally, based on our quantitative analysis, again, the two journals were quite different in terms of the drivers of the citations. The impact of the various factors (substance, nature of citation, theory, method) varied over the last three decades, also across the different disciplines. However, substance was clearly an important factor, and to lesser degree, theory and method as well. The citation drivers of the two journals differed, although they did not vary much over time. These findings provided more

support for the differing impacts and discourses taking place among business historians in the United States and Europe.

The study at hand has obvious weaknesses. The fact that we only included the most cited articles in our analysis may have distorted the results; the most cited ones being extraordinary cases when compared to all articles studied for example by de Jong et al. (2015). We therefore tested the reliability of the results to a certain extent by also analysing a random sample of business history articles and articles that cited them, together with an analysis of the most cited economic history articles. By and large, the results were similar, thus reinforcing our main findings. However, there are numerous factors that we are not able to analyse with the material at hand. For example, the reputation of the author may influence citation impacts. Indeed, the most cited ones include top names in business history (like Wilkins, Hannah, and Galambos) and also in economic history (like Broadberry and Crafts), and some authors have gained popularity among management scholars (like Christensen, Cusumano, and Langlois). Furthermore, the affiliation of the most cited authors might have some impact on the citation counts. The preferences of the editors of the journals remain a question mark. For example, the editors of *Business History Review* favoured technology-oriented articles in the early 1990s, which proved to be a good choice in terms of gaining citations over a longer period of time: In fact, technology-oriented articles accounted for some 15 per cent of all the articles published in BHR from 1990 to 1995, yet they accounted for almost 60 per cent of the citations¹³.

The size of the field is the single most important factor in citation counts. As argued in the introduction, business history is situated in the middle of the giant disciplines of management, economics, and history and should benefit from this position – and to a certain degree, it has. Nevertheless, the total number of business history journals is below ten, as the number of management journals alone comprises hundreds. The major business history societies in Europe (EBHA), US (BHC) and in Japan have relatively small memberships, whereas the Academy of Management alone has over 18,000 members¹⁴. Thus, when compared to the size of the field, business history is not doing at all badly with the citations, although it is far behind economics or management studies in impact factors. Nevertheless, business history journals appear to do better than economic history journals. In fact, to achieve an impact similar to that of management studies, business history would need hundreds of new scholars and dozens of new journals.

Editors seeking for better impacts should therefore emphasize articles that appeal to neighbouring disciplines, and the business history community as a whole should try to grow (if possible). For example, of the journals we analysed, *Business History* has clearly benefited from having increased the number of issues published per year. Moreover, business historians should not hesitate to enter into theoretical and methodological debates. Such forays can increase the visibility of the field across the spectrum, and thus lead to fertile dissemination of our collective empirical expertise. In addition, our quantitative analyses could be done differently, especially since most of the regressions had very low overall explanatory value. And we should think of better explanatory variables to overcome possible omitted variable bias. Finally, as pointed out in an earlier study, quantitative analysis can enhance the delivery and impact of knowledge within and beyond the field of business history, so business historians should be more open to embrace even more

¹³ Web of Science, February 6, 2017.

¹⁴ aom.org, February 6, 2017.

complicated quantitative methods. However, fundamentally the appeal of business history lies in its ability to deliver useful case studies and stories, so the qualitative dimension of the analysis should not be overlooked either. Let the best story win, as long as the theoretical and empirical framework allow it to be widely applicable, thus increasing the appeal of the field of business history as a whole.

REFERENCES

- Abramo, G., C. A. Angelo, and A. Caprasecca. 2009. "Allocative efficiency in public research funding: Can bibliometrics help?" *Research Policy* 38 (1): 206-215.
- Abramovitz, M. 1986. Catching up, forging ahead and falling behind. *Journal of Economic History* 46 (2): 385-406.
- Amatori, F. and G. Jones, eds. 2003. *Business history around the world*. Cambridge: Cambridge University Press.
- Andrew, L. I. M., M. A. Hong, W. E. N. Qi, X. U. Zhou, and C. Brenda. 2009. "Distinguishing Citation Quality for Journal Impact Assessment." *Communications of the ACM* 52 (8): 111-116.
- Baskin, J. B. 1988. "The development of corporate financial markets in Britain and the United States, 1600–1914: overcoming asymmetric information." *Business History Review* 62 (2): 199-237.
- Boyns, T. 1998. "British business history: A review of the periodical literature for 1996." *Business History* 40 (2): 95-114.
- Broadberry, S. N. and N. F. Crafts. 1996. "British economic policy and industrial performance in the early post-war period." *Business History* 38 (4): 65-91.
- Brunninge, O. 2009. "Using history in organizations: How managers make purposeful reference to history in strategy processes." *Journal of Organizational Change Management* 22 (1): 8-26.
- Casson, M. 1997. "Institutional economics and business history: a way forward?" *Business History* 39 (4): 151-171.
- Casson, M. 1999. "The economics of the family firm." *Scandinavian Economic History Review* 47 (1): 10-23.
- Casson, M. 2010. "Entrepreneurship: theory, institutions and history. Eli F. Heckscher Lecture, 2009." *Scandinavian Economic History Review* 58 (2): 139-170.
- Cheffins, B. and S. Bank 2009. "Is Berle and Means Really a Myth?" *Business History Review* 83 (3): 443-474.
- Christensen, C. M. 1993. "The rigid disk drive industry: A history of commercial and technological turbulence." *Business history review* 67 (4): 531-588.
- Church, R. 1993. "The family firm in industrial capitalism: International perspectives on hypotheses and history." *Business History* 35 (4): 17-43.
- Clark, P. and M. Rowlinson. 2004. "The Treatment of History in Organisation Studies: Towards an 'Historic Turn'?" *Business History* 46 (3): 331-352.
- Colli, A., C. Howorth and M. B. Rose. 2013. "Long-term perspectives on family business." *Business History* 55 (6): 841-854.
- Colli, A. and M. Larsson. 2014. "Family business and business history: An example of comparative research." *Business History* 56 (1): 37-53.
- Colli, A. & M. Vasta. 2015. "Large and entangled: Italian business groups in the long run". *Business History* 57 (1): 64-96.
- Cusumano, M. A., Y. Mylonadis, and R. S. Rosenbloom. 1992. "Strategic maneuvering and mass-market dynamics: The triumph of VHS over Beta." *Business history review* 66 (1): 51-94.
- Davis, C., and F. Carden. 1998. "Research Effectiveness and R&D evaluation in developing countries." *Knowledge, Technology & Policy* 10 (4): 7-30.
- Decker, S. 2016. "Paradigms lost: integrating history and organization studies." *Management and Organizational History*. Published online: 5 Dec 2016.
- Decker, S., M. Kipping and R. D. Wadhvani. 2015. "New business histories! Plurality in business history research methods." *Business History*, 57 (1): 30-40.
- de Jong A., D. M. Higgins and H. van Driel. 2015. "Towards a new business history?" *Business History* 57 (1): 5-29.
- de Jong A., D. M. Higgins and H. van Driel. 2015. "A citation analysis of business history and related disciplines". In *The Routledge Companion to Business History*, edited by John F. Wilson, Steven Toms, Abe de Jong, and Emily Buchnea. Abingdon: Routledge 3- 54
- di Vaio, G., D. Waldenström, and J. Weisdorf. 2012. "Citation success: evidence from economic history journal publications." *Explorations in Economic History*, 49 (1), 92-104.
- Eloranta, J., J. Ojala, and H. Valtonen. 2010a. "Quantitative methods in business history: An impossible equation?" *Management & Organizational History* 5 (1): 79-107.
- Eloranta, J., J. Ojala, and H. Valtonen. 2010b. "Methods, Topics, and Trends in Recent Business History Scholarship." *Business History News. The Newsletter of the Association of Business Historians*. Spring, No. 39.
- Folkman, P., J. Froud, S. Johal, and K. Williams. 2007. "Working for themselves? Capital market intermediaries and present day capitalism." *Business History* 49 (4): 552-572.

- Foreman-Peck, J. and L. Hannah 2012. "Extreme divorce: the managerial revolution in UK companies before 1914." *Economic History Review* 65 (4): 1217-1238.
- Franceschet, M. 2009. "A cluster analysis of scholar and journal bibliometric indicators." *Journal of the American Society for Information Science & Technology* 60 (10): 1950-1964.
- Friedman, W. A. and G. Jones 2011. "Business History: Time for Debate." *Business History Review* 85 (1): 1 - 8
- Froud, J. and K. Williams 2007. "Private equity and the culture of value extraction." *New Political Economy* 12 (3): 405-420.
- Galambos, L. 1970. "The emerging organizational synthesis in modern American history." *Business History Review* 44 (3): 279-290.
- Galambos, L. 1983. "Technology, political economy, and professionalization: central themes of the organizational synthesis." *Business History Review* 57 (4): 471-493.
- Galambos, L. and J. L. Sturchio. 1998. "Pharmaceutical firms and the transition to biotechnology: A study in strategic innovation." *Business History Review* 72 (2): 250-278.
- Gibbert, M., W. Ruigrok, and B. Wicki. 2008. "What passes as a rigorous case study?" *Strategic management journal* 29 (13): 1465-1474.
- Godfray, P. C., J. Hassard, E. S. O'Connor, M. Rowlinson and M. Ruef. 2016. "What is organizational history? Toward a creative synthesis of history and organizational studies." *Academy of Management Review* 41 (4): 590-608.
- Hannah, L. 1974. "Takeover bids in Britain before 1950: an exercise in business 'pre-history'." *Business History* 16 (1): 65-77.
- Hannah, L. 2007a. "The 'Divorce' of ownership from control from 1900 onwards: Re-calibrating imagined global trends." *Business History* 49 (4): 404-438.
- Hannah, L. 2007b. "Pioneering modern corporate governance: A view from London in 1900." *Enterprise & Society* 8 (3): 642-686.
- Hansen, P. E. 2012. "Business History: A Cultural and Narrative Approach." *Business History Review* 86 (4): 693-717.
- Harvey, C. and J. Wilson. 2007. "Redefining *Business History*: an editorial statement." *Business History*, 49 (1): 1-7.
- Harzing, A.-W., and R. van der Wal. 2009. "A Google Scholar h-index for journals: An alternative metric to measure journal impact in economics and business." *Journal of the American Society for Information Science & Technology* 60 (1): 41-46.
- Helper, S. 1991. "Strategy and irreversibility in supplier relations: the case of the US automobile industry." *Business history review* 65 (4): 781-824.
- Huang, M. H. and Y. W. Chang. 2008. "Characteristics of research output in social sciences and humanities: From a research evaluation perspective." *Journal of the American Society for Information Science & Technology* 59 (11): 1819-1828.
- Jarwal, S. D., A. M. Brion, and M. L. King. 2009. "Measuring research quality using the journal impact factor, citations and 'Ranked Journals': blunt instruments or inspired metrics?" *Journal of Higher Education Policy & Management* 31 (4): 289-300.
- Jones, G. and J. Zeitlin eds. 2007. *The Oxford Handbook of Business History*. Oxford: Oxford University Press.
- Jones, G. and T. Khanna. 2006. "Bringing history (back) into international business." *Journal of International Business Studies* 37 (4): 453-468.
- Jones, G., M. H. van Leeuwen, and S. Broadberry. 2012. "The future of economic, business, and social history." *Scandinavian Economic History Review* 60 (3): 225-253.
- Judge, T. A., D. M. Cable, A. E. Colbert, and S. L. Rynes. 2007. "What causes a management article to be cited—article, author, or journal?" *Academy of Management Journal* 50 (3): 491-506.
- Kelly, A., H. Morris, M. Rowlinson, and C. Harvey eds. 2009. *The Association of business schools academic journal quality guide. Version 3. Introduction: Context, purpose and method. March [Online]* http://www.the-abs.org.uk/files//ABS2009web_introduction.pdf (cited Feb 9, 2010).
- Kieser, A. 1994. "Why Organization Theory Needs Historical Analyses - And How This Should Be Performed." *Organization Science*, 5 (4): 608-620.
- Kipping, M. 1999. "American management consulting companies in Western Europe, 1920 to 1990: Products, reputation, and relationships." *Business History Review* 73 (2): 190-220.
- Kipping, M., R. D. Wadhvani, and M. Bucheli. 2014. "Analyzing and interpreting historical sources: a basic methodology". In: Marcelo Bucheli and R. Daniel Wadhvani eds. *Organizations in Time: History, Theory, Methods*, Oxford, 305-330.

- Kipping, M. and B. Üsdiken. 2014. "History in Organization and Management Theory: More Than Meets the Eye." *The Academy of Management Annals* 8 (1): 535-588.
- Kobrak, C. and A. Schneider. 2011. "Varieties of business history: Subject and methods for the twenty-first century." *Business History* 53 (3): 401-424.
- Kor, Y. Y. and J. T. Mahoney. 2000. "Penrose's resource-based approach: The process and product of research creativity." *Journal of Management Studies* 37 (1): 109-139.
- Lamoreaux, N., D. M. G. Raff, and P. Temin. 2008. "Economic Theory and Business History." In G. Jones and J. Zeitlin eds., *The Oxford Handbook of Business History*. Oxford: Oxford University Press.
- Langlois, R. N. 1992. "External economies and economic progress: The case of the microcomputer industry." *Business History Review* 66 (1): 1-50.
- Liebenau, J. 1984. "Industrial R & D in pharmaceutical firms in the early twentieth century." *Business History* 26 (3): 329-346.
- Lockett, A. and A. Wild. 2014. "Bringing history (back) into the resource-based view." *Business History* 56 (3): 372-390.
- Mass, W. 1989. "Mechanical and organizational innovation. The Drapers and the automatic loom." *Business History Review* 63 (4): 876-929.
- Mass, W. and W. Lazonick. 1990. "The British cotton industry and international competitive advantage: The state of the debates." *Business History* 32 (4): 9-65.
- MacDuffie, J. P. 1995. "Human-resource bundles and manufacturing performance. Organizational logic and flexible production systems in the world auto industry." *Industrial & Labor Relations Review* 48 (2): 197-221.
- Mordhorst, M. 2014. "Arla and Danish national history. Business history as cultural history." *Business History* 56 (1): 116-133.
- North, D. C. and B. R. Weingast (1989). Constitutions and commitment. The evolution of institutions governing public choice in 17th century England. *Journal of Economic History* 49 (4): 803-832.
- Ojala, J. and S. Tenold 2013. "What is Maritime History? A Content and Contributor Analysis of the International Journal of Maritime History, 1989-2012." *International Journal of Maritime History* 25 (2): 17-35.
- Perchard, A., N. G. MacKenzie, S. Decker & G. Favero (2017). Clio in the business school: Historical approaches in strategy, international business and entrepreneurship. *Business History* 59, 1-24.
- Penrose, E. T. (1959). *The theory of the growth of the firm*. New York and Oxford.
- Penrose, E. T. 1960. "The growth of the firm—a case study: the Hercules Powder Company." *Business History Review* 34 (1): 1-23.
- Popp, A. (2009). History, a Useful 'Science' for Management? A Response. *Enterprise & Society* 10 (4): 831-836.
- Rhode, P. W., Joshua L. Rosenbloom, and David F. Weiman eds. 2011. *Economic Evolution and Revolution in Historical Time*. Stanford: Stanford University Press, 2011.
- Raff, D. 2013. "How to Do Things." *Enterprise & Society*, 14 (3): 435-466.
- Romer, C. D. 1994. "The End of Economic History?" *Journal of Economic Education* 25 (1): 49-66.
- Rouse, M. J. and U. S. Daellenbach. 1999. "Rethinking research methods for the resource-based perspective: Isolating sources of sustainable competitive advantage." *Strategic Management Journal* 20 (5): 484-494.
- Rosenstreich, D. and B. Wooliscroft. 2009. "Measuring the impact of accounting journals using Google Scholar and the g-index." *British Accounting Review* 41 (4): 227-239.
- Rowlinson, M., C. Booth, P. Clark, A. Delahaye, and S. Procter. 2010. "Social remembering and organizational memory." *Organization Studies*, 31(1): 69-87.
- Rowlinson, M., J. Hassard, and S. Decker. 2014. "Research strategies for organizational history: A dialogue between historical theory and organization theory." *Academy of Management Review* 39 (3), 250-274.
- Rowlinson, M. 2015. "Historiography and the 'historic turn' in organization theory." In: Raza Mir, Hugh Willmot and Michelle Greenwood eds. *The Routledge Companion to Philosophy in Organization Studies*. Abingdon: Routledge.
- Stremersch, S., I. Verniers and P. C. Verhoef. 2007. "The quest for citations: Drivers of article impact." *Journal of Marketing*, 71 (3): 171-193.
- Symeonidis, G. 2008. "The effect of competition on wages and productivity: Evidence from the United Kingdom." *Review of Economics and Statistics* 90 (1): 134-146.
- Tomlinson, J. and N. Tiratsoo 1998. "An old story, freshly told? A comment on Broadberry and Crafts' approach to Britain's early post-war economic performance." *Business History*, 40 (2): 62-72.
- Toms, S. and M. Wright. 2005. "Divergence and convergence within Anglo-American corporate governance systems: Evidence from the US and UK, 1950–2000." *Business History* 47 (2): 267-295.
- Üsdiken, B. and A. Kieser. 2004. "Introduction: History in organisation studies." *Business History*, 46 (3): 321-330.

- Walton, J. K. 2010. "New directions in business history: Themes, approaches and opportunities." *Business History* 52 (1): 1-16
- Whittle, A. and J. Wilson. 2015. "Ethnomethodology and the production of history: studying 'history-in-action'." *Business History* 57 (1): 41-63.
- Wilkins, M. 1992. "The neglected intangible asset: The influence of the trade mark on the rise of the modern corporation." *Business History* 34 (1): 66-95.
- Wilson, J. and S. Toms. 2008. "Fifty years of Business History." *Business History*, 50 (2): 125-126.
- Wilson, J., S. Toms, A. de Jong, and E. Buchnea. (eds.). 2016. *The Routledge Companion to Business History*. Abingdon: Routledge.
- Winter, S. G. 2013. "An Evolutionary Program for Business History?" *Enterprise & Society* 14 (3): 498-506.
- Winter, S. G. 2012. "Capabilities: Their Origins and Ancestry." *Journal of Management Studies* 49 (8): 1402–1406.
- Zeitlin, J. 2003. "Flexibility, Governance, and strategic choice in industrial history." In F. Amatori and G. Jones eds. *Business history around the world* (pp. 62–80). Cambridge: Cambridge University Press.
- Zuccala, A., R. Guns, R. Cornacchia, and R. Bod. (2015). "Can we rank scholarly book publishers? A bibliometric experiment with the field of history." *Journal of the Association for Information Science and Technology*, 66(7), 1333-1347.

Appendix 1. The most cited articles in Business History and Business History Review (Web of Science June 1, 2015)

Business History (N=11)

Author	Title	Year	Volume	Issue	Citations in 2015	2010 in top ten	2016 in top ten
Hannah, L.	The 'divorce' of ownership from control from 1900 onwards: Re-calibrating imagined global trends	2007	49	4	42		X
Wilkins, M.	The Neglected intangible asset - The influence of the trade mark on the rise of the modern corporation	1992	34	1	35	X	X
Broadberry, S. and N. Crafts	British economic policy and industrial performance in the early post-war period	1996	38	4	29	X	X
Clark, P. and M. Rowlinson	The treatment of history in organisation studies: Towards an 'Historic turn'?	2004	46	3	38		
Toms, S. and M. Wright	Divergence and convergence within Anglo-American corporate governance systems: Evidence from the US and UK, 1950-2000	2005	47	2	28		X
Mass W. and W. Lazonic	The British cotton industry and international competitive advantage - The state of debates	1990	32	4	27	X	X
Folkman, P., J. Froud, S. Johal, and K. Williams, Church, R.	Working for themselves? Capital market intermediaries and present day capitalism	2007	49	4	24		X
Liebenau, J.	The family firm in industrial-capitalism - International perspectives on hypotheses and history	1993	35	4	20		X
Casson, M.	Industrial R & D in pharmaceutical firms in the early twentieth century	1984	26	3	21	X	
Hannah, L.	Institutional economics and business history: A way forward?	1997	39	4	22		
Hannah, L.	Takeover bids in Britain before 1950 - Exercise in business pre-history	1974	16	1	22	X	

Business History Review (N=10)

Author	Title	Year	Volume	Issue	Citations in 2015	2010 in top ten	2016 in top ten
Cusumano, M. A., Y. Mylonadis, and R. S. Rosenbloom	Strategic maneuvering and mass-market dynamics - The triumph of VHS over Beta	1992	66	1	145	X	X
Galambos, L.	Emerging organizational synthesis in modern American history	1970	44	3	107	X	X
Langlois, R. N.	External economies and economic progress - The case of microcomputer industry	1992	66	1	88	X	X
Christensen, C. M.	The rigid disk-drive industry - A history of commercial and technological turbulence	1993	67	4	86	X	X
Helper, S.	Strategy and irreversibility in supplier relations - The case of the United-States automobile-industry	1991	65	4	83	X	X
Galambos, L.	Technology, political-economy, and professionalization - Central themes of the organizational synthesis	1983	57	4	76		X
Galambos, L. and J. L. Sturchio,	Pharmaceutical firms and the transition to biotechnology: A study in strategic innovation	1998	72	2	46		X
Penrose, E.	The growth of the firm - A case-study - The Hercules-Powder-Company	1960	34	1	56		X
Kipping, M.	American management consulting companies in Western Europe, 1920 to 1990: Products, reputation, and relationships	1999	73	2	40		X
Baskin, J. B.	The development of corporate financial-markets in Britain and the United-States, 1600-1914 - Overcoming asymmetric information	1988	62	2	40		

FIGURES AND TABLES

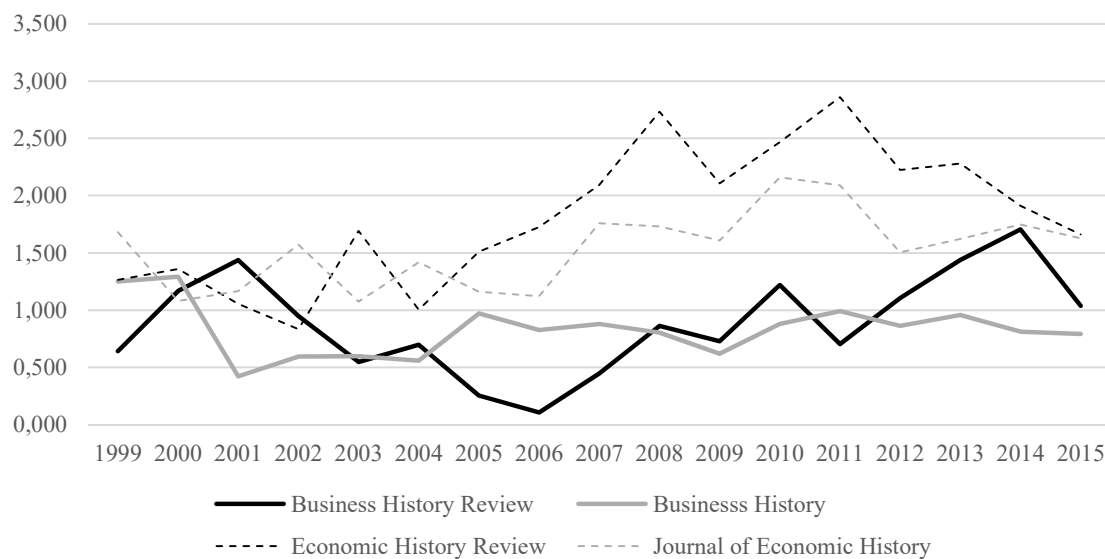


Figure 1. Source Normalized Impact per Paper (SNIP) of Major Business and Economic History Journals, 1999–2015

Source: Scopus <https://www.elsevier.com/solutions/scopus/features/metrics> (downloaded April 28, 2017).

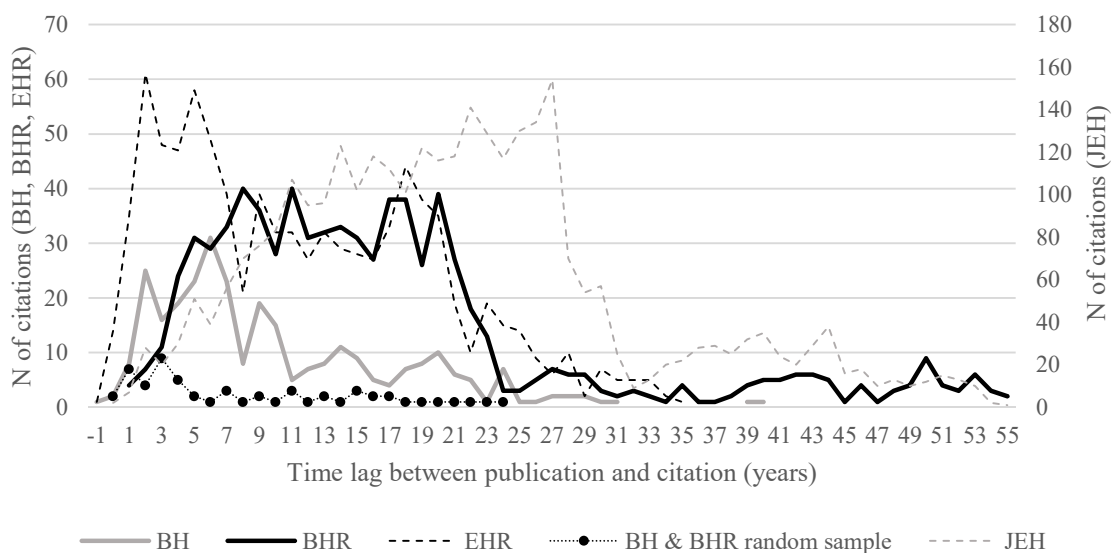


Figure 2. Time Lag between Publication and Number of Citations (BH, BHR, and EHR on Left Axis, JEH on Right Axis)

Table 1. Main Characteristics of Articles Containing Citations to the Top Ten Most Cited Articles in BH and BHR (Compared with Random Sample and Major Economic History Journals)

	BH top 11	BHR top 10	Total	Random Sample (BH & BHR)	EHR & JEH
Number of journals citing	110	257	314	32	1,009
Number of articles citing	370	914	1,284	58	4,026
Number of individual citations	513	1,097	1,610	n/a	n/a
Number of citations to known cases	491	989	1,480	n/a	n/a
First publication year	1982	1961	1961	1959	1964
Last publication year	2015	2015	2015	2017	2017
Average time lag for citing (years)	11	17	15	9	19
Min. time lag for citing (years)	-1	1	0	0	-1
Max. time lag for citing (years)	40	55	55	34	54
Number of citation-chains	3,088	25,347	28,435	258	112,887

Source: Database compiled from WoS (June 1, 2015 for BH and BHR, April 21, 2017 for EHR and JEH, and April 24, 2017 for random sample).

Note: Random sample of 10 BH and 10 BHR articles. Top ten most cited articles in EHR and JEH respectively; Citation-chain = citation to articles citing to the sample articles in BH, BHR, EHR and JEH.

Table 2. The Main Fields of the Journals with Citations to the Most Cited Articles in BH and BHR (Percentages of the Individual Citations, N=1,610)

FIELD	BH %	BHR %	Total %	No. of Journals Citing	Random sample % (BH & BHR)	EHR & JEH %	No. of Journals in WoS
Business History	49	9	21	4	33	1	3
Economic History	12	1	5	6	19	16	13
Business & Management	19	47	38	105	21	8	211
Economics	5	9	8	61	2	28	344
History	2	10	7	27	21	12	110
Social Sciences	3	7	6	32	3	10	3,281
Computer Science & Engineering	3	7	6	21	0	1	1,335
Law	3	2	2	17	0	3	149
Other	4	8	7	30	2	21	6,551
Total	100	100	100	303	100	100	11,997

Source: Database compiled from WoS.

Note: No of Journals refers to number of journals in these categories included in the WoS database. For history journals, the categories “history” and “history of social sciences” are used here. “Other” refers to all journals in the WoS (SCIE or SSCI databases) and “Social Sciences” to WoS SSCI indexed journals. No. of Journals Citing also includes journals that are *not* included in the WoS SCIE or SSCI databases. For the random sample, EHR and JEH WoS categories for citations are used; thus, only one citation per citing article is included in Table 2.

Table 3. Focus of Citations in the Known Cases (Per Cent Shares, N=1,610 articles, and 6,432 votes)

	BH	BHR	Total
Method/data	12	6	8
Theory/conceptual	61	68	66

Substance/novel finding	59	58	59
Other	4	4	4

Source: The database compiled from WoS

Table 4. Tone of Citations in the Known Cases (Per Cent Shares, N = 1,611)

	BH	BHR	Total
Supporting	16	10	12
Critical	12	2	6
Neutral	73	88	83

Source: The database compiled from WoS

Table 5. Impact of Explanatory Variables in the Different Fields (Probit Regressions)

	Before 1990	Between 1990 and 1999	From 2000 Onward
Model 1: Intercept	-0.74*** (-3.82)	-0.01 (-0.05)	-0.70*** (-3.45)
Group 1 Variables:			
<i>Method</i>	-0.04 (-0.73)	-0.22*** (-4.72)	0.31**** (6.41)
<i>Theory</i>	0.08* (1.78)	0.03 (0.74)	-0.12** (-2.57)
<i>Substance</i>	-0.11*** (-3.01)	0.13*** (3.69)	-0.04 (-1.00)
N	1,480	1,480	1,480
Pseudo R ²	0.02	0.03	0.05
Log Likelihood	-763.52	-952.98	-630.37
Model 2: Intercept	-0.08 (-0.13)	-0.58 (-1.11)	-0.64 (-1.17)
Group 2 Variables:			
<i>Critical</i>	-0.26* (-1.73)	0.02 (0.12)	0.22* (1.66)
<i>Neutral</i>	-0.17 (-1.11)	0.26** (2.00)	-0.16 (-1.16)
<i>Support</i>	-0.16 (-1.05)	0.02 (0.14)	0.17 (1.28)
N	1,480	1,480	1,480
Pseudo R ²	0.00	0.03	0.08
Log Likelihood	-773.95	-953.20	-614.60

Note! Z-statistic listed below each coefficient. * = null of no correlation rejected at 10 per cent level; ** = null rejected at 5 per cent level; *** = null rejected at 1 per cent level. Depended variable is whether an article is quoted.

Table 6. Impact of Explanatory Variables in the Different Fields (Probit Regressions): Group 1

	<i>Business History</i>	<i>Economics</i>	<i>Economic History</i>	<i>History</i>	<i>Law</i>	<i>Management</i>	<i>Other</i>	<i>Social Sciences</i>	<i>Technology</i>
<i>Intercept</i>	-0.76*** (-3.94)	-1.06*** (-4.27)	-1.37*** (-4.33)	-1.50*** (-4.90)	-1.48* (-3.54)	-0.61*** (-3.36)	-1.50*** (-5.32)	-1.37*** (-4.60)	-2.40*** (-7.73)
Group 1 Variables:									
<i>Method</i>	0.09* (1.88)	-0.06 (-0.85)	-0.01 (-0.07)	-0.32*** (-3.01)	-0.55* (-1.68)	0.13*** (2.86)	-0.18* (-1.92)	-0.56*** (-3.04)	0.08 (1.03)
<i>Theory</i>	0.07 (1.63)	-0.07 (-1.25)	-0.20*** (-3.00)	0.02 (0.25)	-0.43*** (-4.42)	0.05 (1.09)	0.06 (0.97)	-0.02 (-0.27)	0.17** (2.44)
<i>Substance</i>	0.01 (0.34)	-0.02 (-0.05)	0.14** (2.29)	-0.16** (-2.83)	0.06 (0.74)	-0.02 (-0.55)	-0.00 (-0.02)	-0.05 (-0.96)	0.13** (2.24)
<i>Gap</i>	-0.02*** (-3.93)	-0.01 (-1.26)	-0.01** (-2.06)	0.01*** (3.30)	0.02*** (3.06)	0.01*** (4.70)	-0.01* (-1.90)	0.00 (0.29)	-0.00 (-0.25)
N	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480
Pseudo R ²	0.02	0.01	0.07	0.05	0.14	0.02	0.01	0.03	0.01
Log Likelihood	-770.24	-437.65	-274.82	-286.70	-145.41	-970.18	-347.86	-301.90	-298.89

Note! Z-statistic listed below each coefficient. * = null of no correlation rejected at 10 per cent level; ** = null rejected at the 5 per cent level; *** = null rejected at the 1 per cent level.

Table 7. Impact of Explanatory Variables in the Different Fields (Probit Regressions): Group 2

	<i>Business History</i>	<i>Economics</i>	<i>Economic History</i>	<i>History</i>	<i>Law</i>	<i>Management</i>	<i>Other</i>	<i>Social Sciences</i>	<i>Technology</i>
<i>Intercept</i>	-1.12** (-1.96)	-2.69*** (-3.45)	-1.73** (-2.11)	-0.41 (-0.40)	-2.04 (-1.44)	-0.20 (-0.36)	-1.60* (-1.69)	-0.41 (-0.37)	-0.93 (-0.85)
Group 2 Variables:									
<i>Critical</i>	0.53*** (3.89)	0.18 (0.94)	0.14 (0.68)	-0.43* (-1.69)	-0.41 (-1.03)	-0.32** (-2.40)	-0.17 (-0.71)	-0.94** (-2.25)	-0.45 (-1.54)
<i>Neutral</i>	0.09 (0.60)	0.39** (2.00)	0.04 (0.20)	-0.36 (-1.39)	0.02 (0.05)	-0.07 (-0.48)	0.11 (0.46)	-0.28 (-1.01)	-0.14 (-0.51)
<i>Support</i>	0.21 (1.54)	0.22 (1.17)	0.22 (1.08)	-0.40 (-1.57)	-0.18 (-0.51)	-0.02 (-0.15)	-0.28 (-1.15)	-0.29 (-1.04)	-0.28 (-0.95)
<i>Gap</i>	-0.01*** (-3.67)	-0.00*** (-1.88)	-0.01** (-2.57)	0.01*** (3.46)	0.01 (1.08)	0.01*** (-4.86)	-0.01** (-2.25)	-0.00 (-0.04)	-0.00 (-0.39)
N	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480
Pseudo R ²	0.08	0.02	0.03	0.03	0.03	0.03	0.04	0.02	0.01
Log Likelihood	-724.06	-432.46	-287.17	-294.64	-164.64	-964.14	-337.16	-303.70	-297.36

Note! Z-statistic listed below each coefficient. * = null of no correlation rejected at the 10 per cent level; ** = null rejected at the 5 per cent level; *** = null rejected at the 1 per cent level.

Table 8. Stepwise Regressions for Total Citations: Groups 1 and 2

	Whole Period	Before 1990	Between 1990 and 1999	From 2000 Onward
Model 1: Intercept	22.17*** (2.68)	-1.65 (-1.04)	19.92** (2.54)	2.34*** (6.20)
<i>Gap</i>	-0.59*** (-3.99)	0.48*** (9.10)	-0.99*** (-6.99)	-0.09*** (-8.10)
Group 1 Variables:				
<i>Method</i>	-	-	-	0.67*** (4.34)
<i>Theory</i>	3.43* (1.68)	-	3.78* (1.96)	-0.10 (-0.80)
<i>Substance</i>	2.27 (1.46)	-0.45 (-.93)	3.02** (2.04)	-
N	1,480	1,480	1,480	1,480
Adj. R ²	0.02	0.05	0.03	0.05
F-statistic	6.29	43.41	18.14	28.65
Model 2: Intercept	38.88*** (13.35)	-2.80*** (-2.80)	40.35*** (13.61)	3.16*** (4.83)
<i>Gap</i>	-0.63*** (-4.29)	-	-1.04*** (-7.40)	-0.08*** (-7.79)
Group 2 Variables:				
<i>Critical</i>	-7.46*** (-3.25)	-	-8.01*** (-3.67)	-
<i>Neutral</i>	-	-	-	-0.34** (-2.02)
<i>Support</i>	-	-	-1.50 (-0.75)	0.41* (1.95)
N	1,480	1,480	1,480	1,480
Adj. R ²	0.02	0.05	0.04	0.06
F-statistic	13.09	85.97	20.99	30.72

Note! t-statistic listed below each coefficient. * = null of no correlation rejected at the 10 per cent level; ** = null rejected at the 5 per cent level; *** = null rejected at the 1 per cent level. The dependent variable for the sub-periods = total citations multiplied by the period dummy. We also ran these regressions with Group 1 and Group 2 variables together, and the results were very similar.

Table 9. Stepwise Regressions for Total Citations: Business History Review

	Whole Period	Before 1990	Between 1990 and 1999
Model 1: Intercept	13.66* (1.65)	-0.92 (-0.59)	15.43** (1.97)
<i>Gap</i>	-0.48*** (-3.24)	0.44*** (8.38)	-0.92*** (-6.51)
Group 1 Variables:			
<i>Method</i>	-	-	-
<i>Theory</i>	4.60** (2.25)	-	4.35** (2.25)
<i>Substance</i>	2.54 (1.62)	-0.72 (-1.50)	3.17** (2.14)
N	1,480	1,480	1,480
Adj. R ²	0.01	0.05	0.03
F-statistic	4.99	38.20	16.16
Model 2: Intercept	34.09*** (11.66)	-3.10*** (-2.92)	37.83*** (12.78)
<i>Gap</i>	-0.51*** (-3.48)	0.45*** (8.62)	-0.96*** (-6.91)
Group 2 Variables:			
<i>Critical</i>	-7.98*** (-3.47)	-	-8.43*** (-3.87)
<i>Neutral</i>	-	-	-
<i>Support</i>	-	0.68 (0.91)	-1.65 (-0.82)
N	1,480	1,480	1,480
Adj. R ²	0.01	0.05	0.04
F-statistic	10.83	37.44	19.16

Note: t-statistic listed below each coefficient. * = null of no correlation rejected at the 10 per cent level; ** = null rejected at the 5 per cent level; *** = null rejected at the 1 per cent level. The dependent variable for the sub-periods = total citations multiplied by the period dummy multiplied by the Business History Review dummy. The data for the period after 2000 was not suitable for the regression analysis for this journal due to lack of observations.

Table 10. Stepwise Regressions for Total Citations: Business History

	Whole Period	Before 1990	Between 1990 and 1999	From 2000 Onward
Model 1: Intercept	8.51*** (5.98)	0.56 (0.94)	3.90*** (5.10)	2.34*** (6.20)
<i>Gap</i>	-0.11*** (-4.31)	0.04*** (4.62)	-0.07*** (-3.12)	-0.09*** (-8.11)
Group 1 Variables:				
<i>Method</i>	-	-0.16 (-1.05)	-	0.67*** (4.34)
<i>Theory</i>	-1.17*** (-3.32)	-0.34** (-2.45)	-0.47* (-1.81)	-0.10 (-0.80)
<i>Substance</i>	-0.27 (-1.00)	0.10 (0.93)	-	-
N	1,480	1,480	1,480	1,480
Adj. R ²	0.02	0.02	0.01	0.05
F-statistic	11.60	7.97	7.53	28.65
Model 2: Intercept	6.98*** (6.60)	2.18 (1.23)	2.60*** (6.03)	3.16*** (4.83)
<i>Gap</i>	-0.12*** (-4.58)	0.04*** (3.86)	-0.07*** (-3.27)	-0.08*** (-7.79)
Group 2 Variables:				
<i>Critical</i>	-	-0.64 (-1.48)	0.41 (0,21)	-
<i>Neutral</i>	-0.63** (-2.15)	-0.50 (-1.13)	-	-0.34** (-2.02)
<i>Support</i>	-	-0.79* (-1.79)	-	0.41* (1.95)
N	1,480	1,480	1,480	1,480
Adj. R ²	0.02	0.01	0.01	0.06
F-statistic	13.87	5.95	6.63	30.72

Note: t-statistic listed below each coefficient. * = null of no correlation rejected at the 10 per cent level; ** = null rejected at the 5 per cent level; *** = null rejected at the 1 per cent level. The dependent variable for the sub-periods = total citations multiplied by the period dummy multiplied by the Business History dummy.