# Introduction: new advances in quantitative business history<sup>1</sup>

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#### ABSTRACT

This introduction presents a special issue of *Revista de Historia Industrial - Industrial History Review* devoted to quantitative business history. After a brief overview of the role and position of quantitative approaches in the methodological debate in business history, we summarize some of the salient points of the articles included in this special issue. These articles highlight the valuable use of quantitative datasets and methods in business history. They also testify to the critical contribution of quantitative analyses in the historical investigation of topics in business strategy and the study of causal relationships between foundational elements of the business and financial systems. The papers also reveal the laborious process of constructing historical datasets suitable for quantitative analyses.

KEYWORDS: business history, methodology, quantitative approaches, review.

JEL Codes: B40, M00, N01, N80.

In a provocative article published in 2010, Jari Eloranta, Jari Ojala, and Heli Valtonen discussed whether the relationship between quantitative methods and business history is an "impossible equation". Their investigation into the use of quantitative methods in the articles published in the 1990s by the two premier business history journals highlighted the frequent use of basic quantitative tools, such as charts and tables, and the very limited use of advanced statistical methods. Furthermore, the key question of whether the ar-

1. This introduction is to be considered as a guest editors' note and, therefore, has not been submitted to external review.

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ticles based on quantitative analysis influenced the academic debate to a greater extent than those adopting qualitative methods, did not lead to a clear-cut answer. The use of quantitative methods *per se* had no significant impact, and even a negative one at times, on citations of the articles. However, the use of quantitative methods combined with the length of the articles (*Business History Review*) or a theoretical focus (*Business History*) led to a higher number of citations, thus indicating that these articles had a more significant impact on the debate within and across disciplines. Admittedly, a caveat applies to these findings that is that monographs, book chapters and other publication outlets in the broad fields of economics and business are not included in the analysis (Eloranta, Ojala and Valtonen 2010).

The adoption of quantitative methods in business history was explored in further detail and integrated into a comprehensive discussion on methodological approaches in its post-Chandlerian phase. One significant addition to the discussion arose from the special issue (SI) edited by Abe De Jong and David Michael Higgins, published in *Business History* in 2015, where the editors called for the use of a range of rigorous empirical approaches with the aim of contributing to the development of theories. The opening article by de Jong et al. explains how quantitative methods, such as necessary condition analysis and variable-based techniques, in addition to qualitative methods, could be used to test hypotheses and elaborate theories. These aims are reminiscent of Friedman and Jones' editorial in Business History Review where they encourage business historians "to make use of [...] rich empirical data in order to build broad generalisations" (Friedman and Jones 2011). One of the discipline's future paths identified by Geoffrey Jones is based on the use of quantitative tools and the construction of databases in order to test hypotheses, as well as to develop methodologies for the analysis of small samples and qualitative data (Jones, van Leeuwen and Broadberry 2012). The heuristic potential of quantitative historical databases and statistical analysis is acknowledged in the recent conceptualization of the 'history-informed approach' to research strategy. Historical databases and quantitative techniques enable a rigorous empirical contextualization of a microfoundation of phenomena, an assessment of the importance of the temporal dimension in the construction of competitive advantage, and an investigation of causal relationships in strategic processes (Argyres et al. 2020). These indications, which could be extended to additional fields of business studies, are far from implying that business history should be dominated by one specific methodology, rather, they stress the need for a plurality of rigorous methodologies. Indeed, as Decker, Kipping and Wadhwani discussed, testing hypotheses is only one of the aims of the discipline, in addition to "uncovering sequences and processes, or synthesising complex developments related to the phenomenon being studied" (Decker, Kipping and Wadhwani 2015). Therefore, as further articulated by Eloranta et al. (this SI), a plurality of methods and sources is warranted by the multiplicity of aims, research questions and topics embraced by the discipline, and by the growing contribution of historical research to cognate research domains (Argyres et al. 2020; Wilson et al. 2022; Sørensen and Wadhwani 2023; Decker, Foster and Giovannoni 2023).

The articles in this SI testify to the important role of quantitative datasets and methods in the historical investigation of issues pertaining to business strategy (articles by Häggqvist, and by Roldán and Miranda) and in the exploration of causal relationships between foundational elements of the business and financial systems (articles by Halgin and Pak, and by Rodriguez-Satizabal and Castellanos-Gamboa). The contribution by Eloranta et al. exemplifies the use of quantitative methods as tools of methodological reflection and assessment of the influence of business history on cognate disciplines, such as economic history, management and business studies. The papers also reveal the laborious process of constructing historical datasets suitable for quantitative analyses. Challenges can arise from the continuity of sources or lack thereof, their comparability and accurate matching (articles by Häggqvist, Halgin and Pak, and Rodriguez-Satizabal and Castellanos-Gamboa). In addition, preparing qualitative datasets for quantitative analysis entails background work such as coding (Eloranta et al.).

The first article, entitled 'Between the number and the word: quantitative methods in business history revisited', provides a big picture with regard to the diffusion of quantitative contents and techniques in the field, and to the impact of quantitative methods on citations. In this piece, Jari Eloranta (University of Helsinki), Jari Ojala (University of Jyväskylä), Heli Valtonen (University of Jyväskylä) and Eetu Poso (University of Jyväskylä) extend the investigation they conducted more than a decade ago to the present day. After an accurate codification of all the articles published in the two top journals in the field (Business History and Business History Review) between 2001 and 2019, based both on the existence of quantitative content and techniques and on the theoretical or descriptive orientation of the manuscript, they argue that quantitative content had not increased in these journals during those two decades. Nevertheless, compared to their previous findings, more sophisticated quantitative methods (such as regression analysis) are currently being used by business historians. On the other hand, the authors claim that this quantitative effort is not currently rewarded by an increase in the citations of the articles that make use of them, at least as far as can be measured in a relatively short time period and on the basis of the two highest-ranking journals only (Eloranta et al. 2023).

The article by Daniel S. Halgin (University of Kentucky) and Susie J. Pak (St. John's University), 'The significance of social clubs in the economic network of J. P. Morgan & Co.: partnership agreements, syndicates & interlock-

ing directorates prior to World War II', makes extensive and effective use of statistical and qualitative analysis to study the role played by social clubs in smoothing cooperative relationships among economic actors. The authors focus on the historical networks of investment bankers in the United States before the Second World War, and on the case of the leading New York firm of J. P. Morgan & Co. Analysing Morgan bank's partners' social club ties between 1895 and 1940, the authors make use of mixed-method research utilizing network analysis and visualizations, regression models, and qualitative research in a historical setting. Thanks to this approach, their research clearly identifies the strategic interplay between social embeddedness and economic action enacted through social organizations. It proves the impact that social clubs had in influencing firm ownership, syndicate participation and interlocking directorate board memberships in the United States during the Progressive Era (Halgin and Pak 2023).

The contribution by Alba Roldán (University of Alicante) and José Antonio Miranda (University of Alicante) effectively shows that company history can benefit from the use of a specific econometric technique, Local Projections, which enables researchers to overcome typical obstacles in our discipline. such as small sample size, causality analysis, and endogeneity. Their article entitled 'Local Projections in business history: the case of Inditex' examines the evolution of Inditex as a fast fashion company. It presents the Local Projections method in terms of its strengths and weaknesses, and moves on to apply this method to assess and contrast the effects of several factors identified by the literature as being relevant determinants of Inditex's competitive advantage. They analyse the variables that generated sales increases and decreases between 2000 and 2019 and, based on their empirical investigation, discuss the main reasons for the company's commercial success. Their study confirms some interpretations that are now well established in the literature, but also suggests the need to improve existing explanations and to enrich them with new research (Roldán and Miranda 2023).

Henric Häggqvist (Uppsala University) takes the analysis of this SI from the micro- to the meso-level. The author uses descriptive statistics and ordinary least squares (OLS) regressions to investigate how production and profitability in the brewery sector in Sweden was affected by alcohol policy and regulation in the interwar years. In his article, 'Production and profitability in Swedish breweries, 1924–1950', the author accurately studies the industry using descriptive statistics on production, consumption and profitability data, and multiple regression analysis using the return on assets (ROA) of the companies as the dependent variable. This empirical analysis allows Häggqvist to investigate the new strategies adopted by Swedish brewing companies and the impact of these strategic choices on their performance. In particular, the author claims that Swedish breweries decided to adapt to Sweden's restrictive

alcohol policies by adopting an early strategy of product diversification. However, given the market structure, competition, and cost structure, both production and profitability waned in this industry, and diversification proved to be quite harmful to total output and the profitability of breweries in Sweden in the interwar years (Häggqvist 2023).

Finally, Beatriz Rodriguez-Satizabal (Universidad del Pacífico and Universidad de los Andes) and Sergio Castellanos-Gamboa (Tecnológico de Monterrey) make effective use of quantitative methods to investigate how the affiliation of business groups affected the development of the stock market in emerging economies, such as Colombia, after the Second World War, and how business groups were able to drive the development of the financial market. In their article, entitled 'Affiliation or non-affiliation: the impact of family-owned business groups on the Bogotá stock market, 1950–1980', they analyse panel data from Bogota's stock market, and implement a series of correlated random effects panel regressions. Inverting the traditional view that business groups typically emerge in the absence of developed capital markets, the authors demonstrate that group affiliation had a significant impact on the weighted market capitalization of stocks issued by listed companies. They show that high trading volumes were concentrated in a small subset of firms, and therefore suggest that group-affiliated companies were able to dominate the stock market as a means of financing their investments and fostering their product and geographic diversification (Rodriguez-Satizabal and Castellanos-Gamboa 2023).

The articles in this issue, original in their research approach based on a range of quantitative methods applied to diverse topics, levels of analysis, and geographical areas, are evidence of the important contributions that such methods, in combination with qualitative historical research, make to the growth of the discipline, and to its relevance and impact on related research domains.

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## **Author contribution statement**

Both authors have contributed equally to this introduction.

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# Introducció. Nous avanços en la història quantitativa de l'empresa

#### RESUM

Aquesta introducció presenta el número especial que la *Revista de Historia Industrial - Industrial History Review* dedica a la història quantitativa de l'empresa. Després de repassar breument el paper i el lloc de les aproximacions quantitatives en el debat metodològic de la història de l'empresa, resumim alguns dels punts més destacats dels articles d'aquest número especial. Aquests treballs posen de manifest el paper fonamental que representen les bases de dades i els mètodes quantitatius en la recerca sobre història de l'empresa, així com per a la investigació de temes sobre estratègia empresarial i l'estudi de les relacions causals entre elements bàsics dels sistemes empresarials i financers. Els articles també revelen el laboriós procés de construcció de bases de dades històriques i l'ús que se'n pot fer en les anàlisis quantitatives.

PARAULES CLAU: història empresarial, metodologia, aproximacions quantitatives, revisió.

Codis JEL: B40, M00, N01, N80

# Introducción. Nuevos avances en la historia cuantitativa de la empresa

#### RESUMEN

Esta introducción presenta el número especial que la *Revista de Historia Industrial - Industrial History Review* dedica a la historia cuantitativa de la empresa. Después de repasar brevemente el papel y lugar de las aproximaciones cuantitativas en el debate metodológico de la historia de la empresa, resumimos algunos de los puntos más destacados de los artículos de este número especial. Estos trabajos ponen de manifiesto el rol fundamental que suponen las bases de datos y los métodos cuantitativos en la investigación sobre historia de la empresa, así como para la investigación de temas sobre estrategia empresarial y el estudio de las relaciones causales entre elementos básicos de los sistemas empresariales y financieros. Los artículos también revelan el laborioso proceso de construcción de bases de datos históricos para su uso en los análisis cuantitativos.

PALABRAS CLAVE: historia empresarial, metodología, aproximaciones cuantitativas, revisión.

Códigos JEL: B40, M00, N01, N80



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