

Behavioural Cliometrics

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Abstract

Cliometrics, a field that emerged in the 1950s, originally emphasized systematic analysis of economic history and the use of theoretical and quantitative methods. However, it was inherently linked with behavioural models from the outset. Traditional historians were initially skeptical of cliometrics' quantitative approach but gradually recognized its utility. *Behavioural cliometrics* has bridged the gap by aligning with behavioural economics, incorporating realistic elements of human behaviour into historical research. This synthesis has been greatly facilitated by the methods used in behavioural economics, such as experiments. A rich body of historical studies focusing on behavioural aspects, often employing behavioural experiments, has emerged. History also provides natural experiments for behavioural economics research. Counterfactual thinking and an analytic narrative approach have found their place in historical analysis. A behavioural economics approach is significantly enriching our understanding of history.

Keywords: Cliometrics, history, counterfactual thinking, natural experiments, behavioural economics.

Introduction

The field of *cliometrics* emerged in the 1950s with a strong foundation in the systematic analysis of economic history, emphasizing the importance of theoretical frameworks and rigorous quantitative methods. From its inception, cliometrics has been closely intertwined with behavioural models from the social sciences. Fogel (1983) aptly underscores this connection when he states, “[C]liometricians seek to base the study of history on explicit models of human behavior. They contend that historians are compelled to employ behavioral models, as all attempts to elucidate historical behavior—whether labeled *ideengeschichte*, ‘historical imagination,’ or ‘behavioral modelling’—entail some form of modelling” (p. 25).

One can argue that social sciences, including history, inherently revolve around human behaviour. While classical studies of financial crises such as the Great Depression of 1929 touched upon behavioural aspects, it is only in recent times, with the proliferation of data, that behavioural elements have really taken center stage. The availability of data means that previously unexaminable and unexamined facets of human behavior can now be subjected too

empirical scrutiny. However, traditional historians initially exhibited reservations toward cliometrics' heavy reliance on quantitative evidence and explicit behavioural models. The at-best lukewarm stance of traditional historians towards quantitative methods can be seen as reflective of their humanist tradition, as articulated by historian and social critic Arthur Meier Schlesinger Jr. (1962) in his article, *The Humanist Looks at Empirical Social Research*: "The mystique of empirical social research, in short, compels its adherents to consider only questions that quantitative methods can answer. As a humanist, I assert that most significant questions gain their importance precisely because they defy quantitative resolution. The humanist does not reject the value of quantitative methods but questions their capacity to address all facets of humanistic inquiry" (p. 770). Nevertheless, historians gradually recognized the effectiveness of statistical tools and the pursuit of identifying regularities through systematic knowledge (Aydelotte et al., 1972). A key critique levelled by traditional historians was that cliometricians oversimplified human motivation (Fogel, 1983).

Behavioral cliometrics: early ideas

In light of these criticisms, *behavioural cliometrics*, as we call it, has endeavoured to address such concerns, aligning itself with the principles of behavioural economics. The latter discipline has ardently strived to incorporate assumptions that encompass crucial and realistic aspects of human behaviour, thereby enhancing our understanding of the decision-making environment in which humans operate. This pursuit is aptly reflected in Herbert Simon's (1992) critique of unrealistic assumptions when advocating for the relevance of bounded rationality: "To exclude considerations of human computational capacity from economic theory is akin to excluding gravitational forces from astrophysical theory. In a world without gravity or with gravity shields, things would differ significantly from our actual world. A theory designed for the former scenario would possess little predictive value in the latter... Just as air resistance cannot be ignored when designing parachutes, we must not overlook unrealism in economic theory unless we carefully assess the required level of approximation" (pp. 26, 37).

Various cohorts of historians have demonstrated a keen interest in the study of human behaviour. Among them, the Stuttgart School, with scholars like August Nitschke and Henning Eichberg, has been instrumental in advancing historical behavioural studies (*historische Verhaltensforschung*). In his article titled *Ziele and Methoden historischer Verhaltensforschung*, Nitschke (1974) establishes robust connections to behavioural biology

literature, drawing, for example, from stimulus-response approaches and the work of ethologists such as Konrad Lorenz and Nikolaas Tinbergen. Marc Bloch and Lucien Febvre, founders of the historical journal *Annales*, were deeply concerned with “historical psychology” (history of *mentalités*). Johan Huizinga (1924) underscored the significance of the “forms of thought of an epoch” (see his chapter 18). Some historians have emphasized the role of attitudes, values, and modes of thought in understanding complex systems like feudalism (Burke, 1997; Kula, 1976). Microhistory, influenced by anthropologists like Clifford Geertz, employs a microscopic rather than telescopic approach to comprehend history, as noted by Magnússon and Szijártó (2013). Historians have increasingly underscored the significance of emotions, recognizing that the emotional lives of individuals are profoundly influenced by the norms and institutions that surround them (MacMullen, 2012).

Putting history center stage

Nunn (2021) provides an exhaustive summary of studies focused on the long-term determinants of cultural traits, applying a historical lens. He demonstrates that a wealth of evidence has explored how historical environments or shocks impact the long-term evolution of cultural traits. As he astutely points out, “economists have made significant contributions to a deeper understanding of the historical and ecological factors that have shaped the evolution of cultural traits” (p. 76). Many aspects investigated in these studies align with the core interests of behavioural economics, encompassing areas such as trust, attitudes, cooperation, patience, loss aversion, beliefs, prosociality, and conditional cooperation. Indeed, the preferences that behavioural economists, and economists in general, study are often products of historical forces. For example, Bazzi et al (2020) study Frederick Jackson Turner’s (1893) frontier thesis, which contends that the harsh conditions at the American frontier, during the westward expansion of Europeans through North America, fundamentally shaped individualism in the United States. Bazzi et al (2020) employ a rich combination of data, including historical maps capturing the moving location of the frontier over time, and data on the prevalence of rare first names, which are a robust marker of individualism. A growing body of historically-oriented long-term focused research delves into behavioural economics topics, including time preferences (Galor and Ozak, 2016), loss aversion (Galor and Savitskiy, 2018), and cooperation (Litina, 2016; Buggle and Durante, 2021).

From a methodological perspective, various historical studies align seamlessly with behavioral economics. History offers a plethora of compelling natural experiments, as exemplified by Diamond and Robinson's (2010) edited volume, *Natural Experiments of History*. Historical economists have drawn inspiration from behavioral economics in generating new data through behavioural experiments. For instance, Lowes et al. (2017) leveraged historical variations in state centralization to explore the long-term impact of institutions on cultural norms, using the Kuba Kingdom as a case study. The Kuba Kingdom boasted more advanced state institutions than neighbouring independent villages or chieftaincies. Consequently, the authors compared individuals from the Kuba Kingdom with those from just outside its borders and discovered, among other insights, that more centralized formal institutions were associated with weaker norms of rule-following. More generally, natural experiments and controlled experiments draw from the same methodological reasoning, i.e. understanding causal relationships in Rubin's (1974) potential outcomes framework, while observing assignment to treatment that is either strictly randomly assigned (for controlled experiments) or 'as good as' randomly assigned (for natural experiments).

Counterfactual thinking has been an integral part of historical analysis for centuries, as Gould (1969) reminds us in his essay, *Hypothetical History*: "Historians have long composed sentences in the form of counterfactual conditionals. Tacitus, for instance, reflecting on the death of Germanicus, wrote: 'Had he been the sole arbiter of events, had he held the powers and the title of King, he would have outstripped Alexander in military fame as far as he surpassed him in gentleness, in self-command, and in all other noble qualities'" (p. 195). Counterfactual thinking has gained prominence among historians (Tetlock and Belkin, 1996; Ferguson, 2000; Evans, 2013; Gallagher, 2018). History also lends itself well to the *analytic narrative* approach (Bates et al., 1998), which amalgamates analytical tools like game theory with a narrative format. This approach places a stronger emphasis on choices and decisions from a micro perspective, relying on behavioural models for historical analysis: "By scrutinizing documents, delving into archives, conducting interviews, and surveying secondary literature, we aim to comprehend actors' preferences, perceptions, evaluations of alternatives, information possession, expectations, strategies, and constraints limiting their actions. We then endeavor to construct a narrative that elucidates the outcome of interest" (Bates et al., 1998, p. 11).

Conclusion

Conclusion, cliometrics, with its strong roots in economic history, has evolved to encompass the behavioural underpinnings of historical phenomena. The convergence of cliometrics and behavioural economics has enriched our understanding of history and human behaviour, offering valuable insights into the complex interplay between economics and behaviour throughout the ages.

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