

# Quantitative Economic History

The good of counting

Edited by  
Joshua L. Rosenbloom



Routledge  
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# Quantitative Economic History

The chapters in this book use the analytical tools and theoretical framework of economics to interpret quantitative historical evidence, offering new ways to approach historical issues and suggesting entirely new types of evidence outside conventional archives. Rosenbloom has gathered together seven essays from leading quantitative economic historians, illustrating the breadth of scope and continued importance of quantitative economic history.

All of the chapters explore in one way or another the economic and social transformations associated with the emergence of an industrial and post-industrial economy, with most focusing on the transformations of the U.S. economy in the late nineteenth and early twentieth centuries, the technological innovations that factored into this transformation, and the relationship between industrialization and rising wealth inequality.

This book will be of great interest to students and researchers engaged with U.S. Economic and British Demographic History, as well as quantitative economists in general.

**Joshua L. Rosenbloom** is Professor of Economics and Associate Vice Provost for Research and Graduate Studies at the University of Kansas.

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*Edited by Joshua L. Rosenbloom*

# Quantitative Economic History

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**Edited by Joshua L. Rosenbloom**

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# Preface

This volume had its origins in a conference held in April 2006 at the University of Kansas, in Lawrence, Kansas, in honor of Thomas Weiss. The participants in the conference included several of Weiss's students and many of his research collaborators. Along with Weiss they are among the leading proponents of the value of quantitative approaches to understanding economic and social history.

Thomas Weiss, Tom to his friends, developed a calculating eye on the golf courses in and around his native Poughkeepsie, New York. Finding the angles on a golf course not all that different from those in the principles of economics, Tom leveraged his skills on the links into a scholarship to Holy Cross. After college, Tom gave up on his PGA Tour hopes and moved on to the University of North Carolina at Chapel Hill, completing his doctorate in 1967.<sup>1</sup> At Chapel Hill, Tom met his friend and long-time collaborator, Fred Bateman, who had come there to work with William Parker.

Although Tom missed the opening shots of the Cliometric Revolution, he witnessed and participated in many of its battles.<sup>2</sup> The Cliometric approach employs quantitative evidence, informed by economic theory, to better understand the historical circumstances from which that evidence was generated. During his career, Weiss has embodied the twin ideals of careful attention to historical context and the innovative use of quantitative evidence to advance our understanding of the development of the American economy.

Following in the footsteps of his mentor, Robert Gallman, Weiss has been a leading contributor to the development of a diverse set of data bases upon which our understanding of American economic development rests. These contributions began with his dissertation, which undertook the measurement of capital, labor, and output in the U.S. service sector between 1840 and 1900. This work remains the benchmark against which other similar histories are measured.

Weiss's starting point was the vast array of data collected by the United States Census. However, the categories used and the questions asked by nineteenth-century government officials rarely fit neatly into the conceptual frameworks developed by twentieth-century economists to classify and measure economic activity, in particular the national income and product accounts developed by Gallman's mentor, Simon Kuznets. The development of approaches to fill in missing categories of data and to bring consistency across

the measurements made at different dates requires attention to detail and a great deal of imagination, qualities that are both abundantly evident in Weiss's work.

Building upon his work on the service sector, Weiss took an interest in measuring labor inputs more broadly. He subsequently made significant contributions to the measurement of the U.S. labor force and its sectoral distribution in the nineteenth century. Building on work begun by Stanley Lebergott, Weiss carefully re-examined census data to more accurately apportion laborers between different sectors. His revision of earlier estimates led to a reinterpretation of nineteenth-century U.S. growth. Specifically, he found that laborers had been over counted in the agricultural sector, especially earlier in the century. Thus, re-allocating these workers from agriculture to other sectors tended to increase estimates of agricultural labor productivity early in the century, with the result that subsequent growth rates were lowered. This finding in turn revised thinking on the pace of U.S. agricultural advancement. While such painstaking research does not always win headlines, getting the details right is important because these basic series underlie so many other accounts.

In addition to his contributions to the development of the statistical underpinnings of our understanding of American economic development, Weiss has also contributed to the debate about how to interpret that development. With Bateman, he collected one of the first micro-samples drawn from the manuscripts of nineteenth-century manufacturing censuses.<sup>3</sup> The rich cross-sectional evidence on the characteristics of a representative sample of manufacturing establishments allowed Bateman and Weiss to offer an insightful analysis of the differential rates of industrialization in the antebellum North and South and to shed new light on the impacts of slavery on the course of southern economic development. Bateman and Weiss carved a careful theoretical and empirical path between scholars who argued antebellum southerners were irrational in their devotion to an agrarian way of life, and those who saw an efficient allocation of resources via regional comparative advantage.

Subsequently, in conjunction with his long-time University of Kansas colleague, Joshua Rosenbloom, and two of Bateman's students, Jeremy Atack and Lee Craig, Weiss has written on a wide range of topics including, but hardly limited to, agricultural labor productivity, nutrition, mortality, U.S. capital markets, the diffusion of steam power, and colonial economic growth. More recently, Weiss has turned his attention to the economic history of tourism, reflecting his tastes in leisure, which run toward travel, fine wine, and good food.

Weiss's contributions to economic history extend well beyond his own research. As a teacher and colleague he has inspired and taught other scholars in diverse ways. Many of his students at the University of Kansas recall his courses as the most demanding and rewarding part of their studies. No matter whether he was teaching introductory economics or graduate economic history, Weiss managed to find ways to engage the students, to teach them about the application of economics to real world problems, and to illustrate the insights of economic theory and history. His reputation as a classroom teacher was unequalled in his

years at Kansas. Once, when Weiss, Craig, Rosenbloom, and a few other Cliometricians, who shall remain nameless for their own good, were in a bar in Oxford, Ohio, they managed to join the members of a woman's volleyball team visiting from another campus. Incredibly, one of the young women knew of Weiss's classroom reputation from a friend of hers who had taken one of his classes.

The high standards of his scholarship and the generosity of his spirit have led to many honors and recognitions. Thomas Weiss has served as editor of the *Journal of Economic History*, as Executive Secretary and President of the Economic History Association, and as a trustee of the Cliometric Society. He has been a long time Research Associate of the National Bureau of Economic Research, and was one of the first recipients of the famed Clio "can."

All those who have had the opportunity to work closely with Tom know how fortunate they have been. His ability to combine exacting standards of scholarship with an irrepressible sense of fun, and an enjoyment of good food and drink, and exotic travel set an example to which all scholars might aspire.

## Notes

- 1 Weiss describes his decision to pursue economic history in "An Interview with Thomas Weiss," *The Newsletter of the Cliometric Society* (Summer 2002, vol. 17, no. 2: 3-4)
- 2 A complete listing of the Weiss's publications can be found at the end of this volume.
- 3 James Foust was also involved in the collection of these data, but not in their subsequent analysis. Jeremy Attack, a student of Bateman's, was also involved in this project, initially as a graduate student, and has subsequently extended this data collection effort to include a number of post-bellum manufacturing censuses as well.

# Acknowledgments

I wish to thank Jeremy Atack, Fred Bateman, Lou Cain, Lee Craig, John Ermisch, Price Fishback, Michael Haines, and Bob Margo whose role in producing this volume extends far beyond the chapters they have contributed. Their encouragement, advice, and editorial assistance have been invaluable. I would also like to thank Joseph Sicilian for his help planning the conference held at the University of Kansas, and Leanea Wales for taking care of all the logistical issues surrounding the conference. Finally, I wish to express my appreciation to the Department of Economics at the University of Kansas and Chancellor Robert Hemenway for assistance with conference expenses.

# 1 Editor's introduction

## The good of counting

*Joshua L. Rosenbloom*

BOSWELL: Sir Alexander Dick tells me, that he remembers having a thousand people in a year dine at his house: that is, reckoning each person as one, each time that he dined there.

JOHNSON: That, Sir is about three a day.

BOSWELL: How your statement lessens the idea.

JOHNSON: That, Sir is the good of counting. It brings every thing to a certainty, which before floated in the mind indefinitely.

BOSWELL: But *Omne ignotum pro magnifico est*: one is sorry to have this diminished.

JOHNSON: Sir, you should not allow yourself to be delighted with error.

(Boswell's *Life of Johnson* (Oxford University Press ed.: Oxford 1934): IV, p. 204 (18 April 1783, Aetat. 74))

One of the principal achievements of the cliometric revolution is the approach to quantitative economic history that it spawned (McCloskey 1978). Economic historians have, of course, always relied upon quantitative evidence, but beginning in the 1950s cliometricians began to analyze quantitative data in new ways. Most importantly they explicitly acknowledged the connection between economic theory and quantitative evidence. Theory not only provided guidance about what to measure, but also how to measure it, and in turn, then, suggested entirely new types of evidence that had not previously been subjected to careful analysis. Even now, after more than half a century, the field of quantitative economic history continues to yield new insights about the past.

One important contribution of quantitative economic history has been the extension and refinement of measures of national income for periods before the formation of modern government statistical agencies. The reconstruction of these historical time series describing the pace and pattern of economic growth provides an essential foundation and consistency check for narrative accounts and more narrowly focused histories of particular sectors or industries. Not only does theory provide a framework for assembling readily available statistical information about the past, but it has proved essential in working out methods to bridge gaps in the historical record through creative reconstruction.<sup>1</sup>

In addition to providing a basis for reconstructing the quantitative dimensions