## BUSINESS

# HISTORY REVIEW

SPRING 2022 https://doi.org/10.1017/S0007680522000253 Published online by Cambridge I



© 2022 by The President and Fellows of Harvard College. All rights reserved.

ISSN 0007-6805



#### VOLUME 96 NUMBER 1 SPRING 2022

EDITORS • Walter A. Friedman and Geoffrey Jones PRODUCTION MANAGER • David Shorten Harvard University

## EDITORIAL ADVISORY BOARD

Franco Amatori, Università Bocconi Edward J. Balleisen, Duke University María Inés Barbero, Universidad de Buenos Aires Bernardo Bátiz-Lazo, University of Northumbria Hartmut Berghoff, Göttingen University Ann-Kristin Bergquist, Umeå University Marcelo Bucheli, University of Illinois Brian R. Cheffins, University of Cambridge Andrea Colli, Bocconi University Carlos Dávila, Universidad de los Andes Jeffrey Fear, University of Glasgow Patrick Fridenson, École des Hautes Études Margaret B. W. Graham, McGill University Per H. Hansen, Copenhagen Business School Gelina Harlaftis, Ionian University Richard R. John, Columbia University Pamela W. Laird, University of Colorado, Denver Kenneth J. Lipartito, Florida International University Rowena Olegario, University of Oxford Susie J. Pak, St. John's University Nuria Puig, Universidad Complutense de Madrid Mary B. Rose, Lancaster University Catherine Schenk, University of Oxford Keetie Sluyterman, Utrecht University Simon Ville, University of Wollongong Mira Wilkins, Florida International University Martín Monsalve Zanatti, Universidad del Pacífico Jonathan Zeitlin, University of Amsterdam

#### BOOK REVIEW BOARD

Xavier Durán, Universidad de los Andes Valeria Giacomin, Bocconi University Ai Hisano, Kyoto University Caitlin C. Rosenthal, University of California, Berkeley Chinmay Tumbe, Indian Institute of Management Ahmedabad

HARVARD BUSINESS SCHOOL

Business History Review is a top-tier refereed journal that seeks to publish articles with rigorous primary research that address major topics of debate, offer comparative perspectives, and contribute to the broadening of the subject. We are primarily concerned with the history of entrepreneurs, firms, and business systems, and with the subjects of innovation, globalization, and regulation. We are also interested in the relation of businesses to the environment and to political regimes.

The *Business History Review* (ISSN 0007-6805) is published 4 times a year, in the spring, summer, autumn, and winter by Cambridge University Press, One Liberty Plaza, 20th Floor, New York, NY 10006, for Harvard Business School.

- EDITORIAL OFFICE Business History Review, Harvard Business School, Soldiers Field, Boston, MA 02163, USA, Telephone: +1 617 495 1003, Fax: +1 617 495 2705, E-mail: bhr@hbs.edu.
- SUBMISSIONS See Guidelines for Contributors on inside back cover. Manuscripts, books for review, commentary, and all editorial correspondence should be sent to Walter A. Friedman, Coeditor (contact details as above).
- PUBLISHING OFFICE Cambridge University Press, UPH, Shaftesbury Road, Cambridge CB2 8BS, UK.
- SUBSCRIPTIONS The 2020 subscription price is US\$364 (£229) for institutions' print and electronic access. The paper-only price for individuals is US\$74 (£53). There is a reduced rate of US\$40 (£25) for students, Harvard Business School alumni, and members of the following associations: Academy of Management, Association of Business Historians, Business History Conference, Business History Society of Japan, Economic History Association, European Business History Association, German Association for Business Historians.

All prices include delivery by air if appropriate, and exclude VAT. EU subscribers (outside the UK) who are not registered for VAT should add VAT at their country's rate. VAT-registered members should provide their VAT registration number. Japanese prices for institutions (including ASP delivery) are available from Kinokuniya Company Ltd., P.O. Box 55, Chitose, Tokyo 156, Japan.

Orders, which must be accompanied by payment, may be sent to a bookseller, subscription agent, or direct to the publisher: Cambridge University Press, UPH, Shaftesbury Road, Cambridge CB2 8BS, UK; or in the USA, Canada, and Mexico: Cambridge University Press, Journals Fulfillment Department, One Liberty Plaza, 20th floor, New York, NY 10006.

Periodicals postage is paid at New York, NY and additional mailing offices. POSTMASTER: send address changes in USA, Canada, and Mexico to Journals Fulfillment Department, One Liberty Plaza, 20th floor, New York, NY 10006; or e-mail subscriptions\_newyork@cambridge.org. Send address changes elsewhere to Cambridge University Press, UPH, Shaftesbury Road, Cambridge, CB2 8BS, UK.

- RIGHTS AND PERMISSIONS Please contact Linda Nicol, Cambridge University Press, UPH, Shaftesbury Road, Cambridge, CB2 8BS, UK.
- COPYING This journal is registered with the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, USA. Organizations in the USA who are also registered with the C.C.C. may therefore copy material (beyond the limits permitted by sections 107 and 108 of US Copyright law) subject to payment to the C.C.C. of the per-copy fee of US\$15.00. This consent does not extend to a multiple copying for promotional or commercial purposes. Code 0007-6805/17. ISI Tear Sheet Service, 3501 Market Street, Philadelphia, PA 19104, USA, is authorized to supply single copies of separate articles for private use only. Organizations authorized by the Copyright Licensing Agency may also copy material subject to the usual conditions. For all other use, permission should be sought from Cambridge or from the American branch of Cambridge University Press.
- ADVERTISING To advertise in the journal please contact the relevant advertising promoter for your area: in the USA, Canada, or Mexico: USASales@cambridge.org or telephone +1 212 337 5053; in the UK, Europe, or rest of the world: ad\_sales@cambridge.org or telephone +44 1223 325083.
- Business History Review articles are listed in ABI/INFORM Global, America: History and Life, Book Review Index, Business Methods Index, Business Periodical Index, EBSCO Academic Search Premiere, EBSCO Business Source Complete, Historical Abstracts, IBSS, Journal of Economic Literature, Journal Citation Reports/Social Sciences Edition, JSTOR, Proquest 5000, Proquest Central, Social Sciences Citation Index<sup>®</sup>, Social Scisearch<sup>®</sup>, and Standard Periodical Directory.
- The paper used in this journal meets the minimum requirements of the American National Standard for Permanence of Paper for Printed Library Materials, Z.39.48 and is 50% recycled, 10% postconsumer.
- Visit our Web site for further details and current information: https://www.cambridge.org/core/journals/ business-history-review.

## Contents

## STANDARDS AND THE GLOBAL ECONOMY JoAnne Yates and Craig N. Murphy, Guest Editors

Editors' Note • 1

## ARTICLES

JoAnne Yates and Craig N. Murphy, Introduction: Standards and the Global Economy • 3

Anne G. Hanley, Men of Science and Standards: Introducing the Metric System in Nineteenth-Century Brazil • 17

Stephen Mihm, Inching toward Modernity: Industrial Standards and the Fate of the Metric System in the United States • 47

Grace Ballor, CE Marking, Business, and European Market Integration • 77

Andrew L. Russell, James L. Pelkey, and Loring Robbins, The Business of Internetworking: Standards, Start-Ups, and Network Effects • 109

*Xaq Frohlich*, Making Food Standard: The U.S. Food and Drug Administration's Food Standards of Identity, 1930s–1960s • 145

Margaret B. W. Graham, Comment • 177

## ANNOUNCEMENTS • 189

REMEMBERING PAUL MIRANTI • 193

## **REVIEW ESSAY**

*Lee Vinsel*, Intellectual Property and National Economies. A review of *Graeme Gooday and Steven Wilf*, Patent Cultures: Diversity and Harmonization in Historical Perspective; and *Zorina Khan*, Inventing Ideas: Patents, Prizes, and the Knowledge Economy • 195

## BOOK REVIEWS

Hartmut Berghoff and Ingo Köhler, Varieties of Family Business: Germany and the United States, Past and Present. *Reviewed by* Felix Selgert • 223

> Fanny Bessard, Caliphs and Merchants: Cities and Economies of Power in the Near East (700–950).Reviewed by J. G. Manning • 213

Marcia Chatelain, Franchise: The Golden Arches in Black America. *Reviewed by* LaShawn Harris • 201

Philip Coggan, More: A History of the World Economy from the Iron Age to the Information Age. *Reviewed by* Tom J. Cinq-Mars • 211

Joshua B. Freeman, ed., City of Workers, City of Struggle: How Labor Movements Changed New York. *Reviewed by* Robert W. Snyder • 225

Timothy J. Hill, A History of the British Lubricants Industry. Reviewed by Francesco Gerali • 221

Henning Hillmann, The Corsairs of Saint-Malo: Network Organization of a Merchant Elite under the Ancien Régime. *Reviewed by* Oliver Cussen • 216

Karolina Hutková, The English East India Company's Silk Enterprise in Bengal, 1750–1850: Economy, Empire and Business. *Reviewed by* Jagjeet Lally • 206

*Christel Lane*, From Taverns to Gastropubs: Food, Drink, and Sociality in England. *Reviewed by* Jeffrey M. Pilcher • 218

Mary Beth Meehan and Fred Turner, Seeing Silicon Valley: Life inside a Fraying America. *Reviewed by* Jeannette Alden Estruth • 232

Samuel Evan Milner, Robbing Peter to Pay Paul: Power, Profits, and Productivity in Modern America. *Reviewed by* David L. Stebenne • 230

Keeanga-Yamahtta Taylor, Race for Profit: How Banks and the Real Estate Industry Undermined Black Homeownership. *Reviewed by* A. Mechele Dickerson • 203 *Giacomo Todeschini*, Come l'acqua e il sangue: Le origini medievali del pensiero economico. *Reviewed by* Robert Fredona • 208

Gabriel Winant, The Next Shift: The Fall of Industry and the Rise of Health Care in Rust Belt America. *Reviewed by* Andrew T. Simpson • 227