Human Capital and Institutions

A Long Run View

Human Capital and Institutions is concerned with human capital in its many dimensions and brings to the fore the role of political, social, and economic institutions in human capital formation and economic growth. Written by leading economic historians, including pioneers in historical research on human capital, the chapters in this text offer a broad-based view of human capital in economic development. The issues they address range from nutrition in premodern societies to twentieth-century advances in medical care; from the social institutions that provided temporary relief to workers in the middle and lower ranges of the wage scale to the factors that affected the performance of those who reached the pinnacle in business and art; and from political systems that stifled the advance of literacy to those that promoted public and higher education. Just as human capital has been a key to economic growth, so has the emergence of appropriate institutions been a key to the growth of human capital.

David Eltis is Robert W. Woodruff Professor of History at Emory University and has held visiting appointments at Harvard and Yale universities. He is author of *The Rise of African Slavery in the Americas*, co-compiler of *The Transatlantic Slave Trade: A Database on CD-ROM* and its successor at www.slavevoyages.org, co-editor of *Extending the Frontiers: Essays on the New Transatlantic Slave Trade Database* (with David Richardson), co-editor of *Slavery in the Development of the Americas* (with Frank Lewis and Kenneth Sokoloff), and editor of *Coerced and Free Migrations: Global Perspectives*. He is also author and co-author of numerous articles on slavery, migration, and abolition, most recently in the *American Historical Review* and the *William and Mary Quarterly*.

Frank D. Lewis is Professor of Economics at Queen's University, Kingston, Canada. He has written on historical issues involving agriculture, land settlement, transportation, Native American history, war, and slavery. His work has appeared in a variety of publications that include leading economic history and economics journals. Articles on the North American fur trade of the eighteenth century (with Ann Carlos) have been awarded prizes by the Canadian Economic Association and the Library Company of Philadelphia. Some of his more recent papers have appeared in the *Economic History Review*, the *Journal of Economic History*, and *Explorations in Economic History*.

Kenneth L. Sokoloff (1953–2007) was Professor of Economics at the University of California, Los Angeles, and research associate at the National Bureau of Economic Research.

Human Capital and Institutions

A Long Run View

Edited by DAVID ELTIS

Emory University

FRANK D. LEWIS

Queen's University, Canada

KENNETH L. SOKOLOFF

University of California, Los Angeles







Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

103 Penang Road, #05–06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9780521769587

© Cambridge University Press & Assessment 2009

This publication is in copyright. Subject to statutory exception and to the provisions of relevant collective licensing agreements, no reproduction of any part may take place without the written permission of Cambridge University Press & Assessment.

First published 2009

A catalogue record for this publication is available from the British Library

Library of Congress Cataloging-in-Publication data

Human capital and institutions : a long run view / edited by David Eltis, Frank Lewis, Kenneth L. Sokoloff.

p. cm.

Includes bibliographical references and index.

ISBN 978-0-521-76958-7 (hardback)

1. Human capital. 2. Economic development. 3. Business and education.

I. Eltis, David, 1940– II. Lewis, Frank, 1947– III. Sokoloff, Kenneth Lee. IV. Title.

HD4904.7.H8583 2009

306 - dc22 2009020208

ISBN 978-0-521-76958-7 Hardback

Cambridge University Press & Assessment has no responsibility for the persistence or accuracy of URLs for external or third-party internet websites referred to in this publication, and does not guarantee that any content on such websites is, or will remain, accurate or appropriate. Information regarding prices, travel timetables, and other factual information given in this work is correct at the time of first printing but Cambridge University Press & Assessment does not guarantee the accuracy of such information thereafter.

Contents

In Memoriam: Kenneth L. Sokoloff		page vii
Co	ntributors	ix
	Introduction	I
	PART I HEALTH AND LIVING STANDARDS	
1.	Biotechnology and the Burden of Age-Related Diseases Robert W. Fogel	II
2.	Extending the Reach of Anthropometric History to the Distant Past <i>Richard H. Steckel</i>	27
3.	Insecurity, Safety Nets, and Self-Help in Victorian and Edwardian Britain George R. Boyer	46
	PART II INSTITUTIONS AND SCHOOLING	
4.	The Evolution of Schooling in the Americas, 1800–1925 Stanley L. Engerman, Elisa V. Mariscal, and Kenneth L. Sokolo	93 ff
5.	Why the United States Led in Education: Lessons from Secondary School Expansion, 1910 to 1940 <i>Claudia Goldin and Lawrence F. Katz</i>	143
6.	The Production of Engineers in New York Colleges and Universities, 1800–1950: Some New Data <i>Michael Edelstein</i>	179

vi	Contents	
	PART III HUMAN CAPITAL OUTLIERS	
	Young Geniuses and Old Masters: The Life Cycles of Great Artists from Masaccio to Jasper Johns David W. Galenson and Robert Jensen	221
	An Elite Minority: Jews among the Richest 400 Americans <i>Peter Temin</i>	248
	PART IV CONSTRAINTS IN LABOR AND FINANCIAL MARKETS	
	Suffrage and the Terms of Labor <i>Robert J. Steinfeld</i>	267
	Prodigals and Projectors: An Economic History of Usury Laws in the United States from Colonial Times to 1900 <i>Hugh Rockoff</i>	285
Inde	22	325

In Memoriam: Kenneth L. Sokoloff

Kenneth L. Sokoloff, who was a close collaborator of Stanley Engerman, passed away prematurely on May 21, 2007. This volume is an occasion to also acknowledge his contributions.

It seems particularly fitting to evoke Sokoloff's work on endowments and institutions because he began it as part of a dissertation completed under the supervision of Robert Fogel at Harvard in 1982. This part of his research was closest to that pursued by Engerman, a co-author and close collaborator of Fogel's, and what had been a long-running conversation blossomed into full-fledged collaboration in the 1990s.

Much of Sokoloff's research has focused on the interaction between the expansion of markets and productivity growth. In his early work on industrialization he emphasized the importance of market forces in spurring firms to reorganize their modes of production. This theme recurred in his work on the relationship between agricultural seasonality and the adoption of capital intensive methods of manufacturing. He also reprised this approach in his work on patenting and invention, in which he showed that patenting rates were much higher in counties traversed by navigable waterways and that repeat inventors were likely to move to such counties as they pursued the returns to their discoveries. Over time, however, Sokoloff became more deeply concerned with understanding how endowments and institutions coevolved, rather than simply attributing primacy in economic outcomes to one or the other. It was this latter set of interests that brought him to work closely with Engerman.

In a 1997 jointly authored paper, "Factor Endowments: Institutions, and Differential Paths of Growth Among New World Economies: A View from Economic Historians of the United States," Engerman and Sokoloff turned to a fundamental puzzle of American economic history. Why was it that those areas that were the most economically successful before 1800 have generally fared poorly in the period after 1850? They argued that the endowments Europeans found on arrival played a far more critical role in shaping early

viii

In Memoriam: Kenneth L. Sokoloff

institutions than the colonists' political, religious, or legal backgrounds. On the one hand, where slave-based agriculture took root, institutions hardened over time to ensure the continued unequal distribution of economic and political rights. These institutions did not prove much of a hindrance to prosperity for staple export economies, but they made the transition to the higher income afforded by modern economic growth virtually impossible. On the other hand, where slave-based agriculture was not profitable, institutions developed that allowed easy immigration, access to land, and relatively open political rights, enabling these countries to benefit from the opportunities that industrial development later presented. Sokoloff and Engerman emphasized that a variety of institutional arrangements were tried in each ecological zone but that economies quickly adjusted to take advantage of their endowments. After the publication of their original article, Sokoloff, Engerman, and their co-authors would pen nearly a dozen papers that provided detailed empirical evidence for their argument. These articles have been massively cited and helped persuade economists of the importance of history to understanding economic outcomes.

Our discipline has lost a leader. His personal generosity, intellectual openness, and dedication to the careful gathering of empirical evidence were unparalleled. His commitment to uncovering the sources of long-term economic growth lives on in his students, colleagues, and, we hope, the discipline.

> Naomi R. Lamoreaux, UCLA Jean-Laurent Rosenthal, Caltech

Contributors

George R. Boyer, Cornell University Michael Edelstein, Queens College and The Graduate School, CUNY Stanley L. Engerman, University of Rochester Robert W. Fogel, The University of Chicago Graduate School of Business David W. Galenson, University of Chicago Claudia Goldin, Harvard University Robert Jensen, University of Kentucky Lawrence F. Katz, Harvard University Elisa V. Mariscal, LECG Hugh Rockoff, Rutgers University Kenneth L. Sokoloff, University of California, Los Angeles Richard H. Steckel, Ohio State University Robert J. Steinfeld, University at Buffalo Law School Peter Temin, Massachusetts Institute of Technology