

Knowledge and the Wealth of Nations: A Story of Economic Discovery. By David Warsh. New York: W. W. Norton, 2006. xxii + 426 pp. Index. Cloth, \$27.95. ISBN: 0-393-05996-0.

Reviewed by Michael A. Bernstein

A financial affairs and economics journalist, David Warsh has written a lively “story of economic discovery.” The operative term is “story.” Far from being either a history of economic theory or a narrative of the evolution of the economics profession, *Knowledge and the Wealth of Nations* is at one and the same time an engaging and highly idiosyncratic rendering of enduring debates that have framed and characterized the evolution of the field since the eighteenth century. Warsh is a gifted writer, and he has a wonderful ability to transform arid scholarly communications into exciting, pithy, and meaningful colloquies. Indeed, Part One of the volume (by far the better of two) may properly be read as a thorough and enlightening survey of economic-growth theory from Adam Smith to Robert Solow. Even so, the book also suffers from its journalistic bias—a tendency to avoid precision and detail for the sake of the broad vista, all the while doing damage to the facts and, at times, missing key points. I might add that, as a work of scholarly reflection and assessment, the book is disappointing. Warsh did not craft this work as an intellectual contribution but, rather, wrote it as a kind of academic morality play. This strategy may help to sell books, but it does not anchor important and original contributions to learning.

Fascinated with how economists have struggled to understand (and with how they often misconstrue) the role of knowledge in the creation of “the wealth of nations,” Warsh uses Paul Romer’s influential 1990 *Journal of Political Economy* article, “Endogenous Technological Change,” as a platform on which to construct his entire narrative. The publication of that essay, Warsh believes, constituted a crucial step forward in the efforts of “university-based research economists . . . to say something practical and new about how to encourage economic development in places where it had failed to occur” (pp. xvii–xviii). That dramatic advancement turned knowledge itself into an endogenous part of economic reasoning, allowing economists for the first time to

make sense of such phenomena as increasing returns, economies of scale, and positive externalities as crucial ingredients of growth itself. Readers may, of course, dismiss the pronouncement that Paul Romer's article represents a watershed in the history of economic thought as just another example of Warsh's selective and incomplete reading of the history of economic theory.

Warsh rightly describes the schizophrenia of classical political economy in dealing with the question of costs and returns. In a deft summary of the work of Adam Smith, he shows that the notion of the "invisible hand" was framed in terms of a conception of rising costs and decreasing returns, whereas Smith's celebrated example of the "pin factory" subsisted in a world of falling costs and increasing returns. This contradiction becomes the foundation upon which a captivating and well-written chronicle of the twists and turns of modern economic theory is wrought. In many respects, this story is well told and on point. David Ricardo's theoretical sleight-of-hand, turning economics away from the study of the origins of wealth to the study of its distribution, is properly described. How this maneuver then reframes economics discourse, transforming scarcity and diminishing returns into the defining mantras of a new science, is also thoroughly discussed. Indeed, the ensuing descriptions of how successive generations of leaders in the field—Alfred Marshall, A. C. Pigou, Allyn Young, Piero Sraffa, John Maynard Keynes, John R. Hicks, to name a few—struggled and fumbled with the puzzles of growth are, for the most part, clear and concise. The longer explanations of empirical debates over the meaning of the "residual" in growth calculations, of the development of the concept of "total factor productivity," and of the efforts of a new (post-World War II) generation of theorists to understand knowledge as itself a unique and volatile kind of economic good are also useful sections. All these virtues, however, cannot make up for the volume's most glaring deficiencies—those having to do with Warsh's determination to ignore the works of economists whose arguments he only superficially engages.

Many of the conundrums Warsh explores in the lexicon of economic growth theory are familiar to historians of economic theory. Whether to view competition as a process or as a state, whether to use time as a logical construct in model-building (in which case, it can be reversed) or as a historical parameter (in which case, it cannot), and

whether the goals of production are to meet needs (“production for use”) or to accumulate profits (“production for sale”) have indeed been for centuries some of the central issues in dispute among economists. Walsh reinvents them as topics that are unique to the debates concerning contemporary growth theory. He also dismisses major figures in the development of growth economics with little or no justification. For example, while occasionally acknowledging the fact that Karl Marx wrote about knowledge, science, and economic growth, Warsh relegates his work to sidebars and dismissive assertions. (“So much has been said . . . over the years in the name of Karl Marx that probably the best way to understand his role in history is as a religious leader whose followers often carried guns” [p. 63].) Yet he concedes that Marx worked to fashion, among other things, a “critical history of technology.” But he leaves Marx’s legacy at that. Another crucial investigator in the history of efforts to understand technological change and strategies of investment and accumulation is also strangely patronized. Recognizing that his notion of “creative destruction” greatly furthered economists’ understanding of knowledge and the growth process, Warsh nevertheless spares but a few paragraphs for Joseph Schumpeter, describing him as a “sidelined, disappointed, resentful” figure in the interwar years, an old-world economist who had become “an orphan at the feast of mathematical progress” that was to become the defining signature of the economics profession (p. 123). The point here is not to challenge Warsh’s perceptions of certain key figures in the history of economic theory, perceptions to which he is entitled. My concern is instead derived from the perception that Warsh, in the interest of crafting an exciting “tale,” overlooked more complicated aspects of the story he wished to tell.

Perhaps I have been too critical. There are many virtues to this book, not least of which are the exciting and engaging ways in which Warsh explains some of the foundational work in the economics discipline. As a book suitable for a broad readership, then, *Knowledge and the Wealth of Nations* may be praised. But as a work of scholarly import, its weaknesses are, unfortunately, quite vivid. To be sure, journalistic authors who wish to understand the theory of economic growth (and the modern history of the economics profession) may be excused for not consulting the writings of Erik Dahmén, Ingvar Svennilson, and Walt Rostow. But should they also fail to consult the publications of Roger Backhouse, A. W. Coats, Mary Furner, Philip Mirowski, Mary Morgan, and

Dorothy Ross, their work would then be viewed as neither properly conceived nor adequately executed.

Michael A. Bernstein is professor of history and associated faculty member in economics at the University of California, San Diego (UCSD). He is the author of numerous books and articles on the modern economic and political history of the United States and on the history of economic thought, including A Perilous Progress: Economists and Public Purpose in Twentieth Century America (2002). In 2005, he was appointed dean of arts and humanities at UCSD.