
Within a decade after the first public demonstration of telegraph communication in 1844, companies strung lines across eastern North America and Western Europe, connecting the two in 1866. Ten years later, a second set of transatlantic lines connected Europe with Argentina, Brazil, and other parts of South America. By the 1890s some of the largest ships afloat had extended this web of telegraph cables around the world. Jorma Ahvenainen’s new book examines one piece of the telegraph network that underlay nineteenth-century globalization.

South America’s connection came not via North America but from Europe, driven by expanding world trade in commodities and investments, by the attendant boom in shipping traffic, and by early immigration flows. By 1875 the first lines from Europe to Rio de Janeiro and Buenos Aires had opened, with connections across the Andes to Chile and up the west coast to Peru. By 1882 the west coast lines reached Central America and from there to U.S. financial centers. Until then, all telegraph communication between North and South America passed through London. Not coincidentally, the decades that followed would witness the replacement of European trade and investment with North American dominance through much of the region.

British capital and entrepreneurship dominated the telegraph business through the nineteenth century, although several French, German, and U.S. companies controlled important competing lines by 1914. One of the few firms largely owned by South Americans was the Transandine Company, which operated the land line from Buenos Aires to Valparaiso, thus controlling the key connection between the east and west coasts of South America. Otherwise, the capital, skill, and entrepreneurship came initially from Europe and remained there well into the twentieth century.

Throughout this era, European firms that manufactured cable played large roles in lobbying, promoting, and sometimes financing the cable companies. This is a story that could be told as one of visionary entrepreneurs pushing risky projects to successful conclusion, and in so doing changing the face of international commerce. But it is also one in which political connections, dubious financing, insider deals, and blatant malpractice forged opportunities and sometimes wrecked them. Once laid, difficulties also plagued the new cables, as natural conditions, saboteurs, and shoddy workmanship yielded broken lines and interrupted service.

Those firms that sought the first concessions believed that exclusive rights held the key to financial success and did all they could to wrest such rights from national governments or sought to undermine the efforts of competitors. Only when the terms of the first concessions ended were competing lines established with the blessing of host governments, such as Brazil’s, or after aggressive lobbying by governments in North America and Europe. The French and Germans offered particularly strong support for their cable interests. The first of the competing lines was complete by 1882 and over the next three decades telegraph users gained numerous additional options. Mergers between large scale cable providers increased market power in some areas, but overall competition increased. As a consequence, by 1913 telegraph rates on most transatlantic lines had fallen to a fifth or less of their initial levels. By then, the telegraph had long since become the vascular system through which centers of financial, business, and political activity pumped their vital information. Message
and response times fell from nearly a month to under an hour, and these flows formed one part of the life-blood for the late-century globalizing boom in commerce, investment, and political power.

This book provides a detailed account of the business negotiations involved in gaining cable concessions from South American and European nations that ultimately enabled laying the South American cables between the 1850s and World War I. The book also offers good coverage of negotiated conflicts between concessionaires, of their business maneuvers and court litigation, and of postinstallation business strategies adopted by the cable companies. All this builds on the author’s previous work on international telegraph development, including The Far Eastern Telegraphs: The History of Telegraphic Communication between the Far East, Europe, and America before the First World War (Helsinki: Suoumalainen Tiedeakatemia, 1981), History of the Caribbean Telegraphs before the First World War (Helsinki: Suoumalainen Tiedeakatemia, 1996), and Telegraphs, Trade and Policy: The Role of the International Telegraphs in the Years 1870–1914 (In The Emergence of a World Economy 1500–1914. Papers of the IX International Congress of Economic History. Wiesbaden: Steiner, 1986). Those looking for more than the detailed narrative presented here will not find it, however. The book does not place the development of the South American lines within a broader historical context, nor does it offer any commentary on the economic impact of the new system. It is neither an economic history nor a history of the telegraph as technology. Nevertheless, Ahvenainen’s work should provide an essential reference on the business history of international telegraphy for years to come.

TED BEATTY, University of Notre Dame

UNITED STATES


One might think that enough has been said about the history of the early American iron industry. Business and economic historians have considered its methods of production, technologies, markets, financing, and business forms. Other historians, notably Robert S. Starobin in 1970 (Industrial Slavery in the Old South, New York: Oxford University Press) and Ronald L. Lewis in 1979 (Coal, Iron, and Slaves: Industrial Slavery in Maryland and Virginia, 1715–1865, Westport, CT: Greenwood Press), have examined the southern industry’s use of slaves as production workers. And yet, as John Bezis-Selfa’s Forging America shows, for all this attention, an original perspective on the industry can still produce useful and provocative insights into its history.

Forging America takes readers down some fascinating paths of historical investigation. It is primarily concerned with the contributions of coerced labor—slaves and indentured servants, of course, but also even wage-workers—in the making of iron and the iron industry in Pennsylvania, New Jersey, Maryland, and Virginia during the colonial period and the first decades of independence from Great Britain. These contributions were, Bezis-Selfa argues, crucial to the success of the industry and of the early republic. As workers toiled in the industry, they shaped and were, themselves, shaped by an evolving relationship between gender and work
and by changing conceptions of masculinity in the arena of heavy and dangerous labor.

A central theme of the book is the distinction between the “industrial revolution” and the “industrious revolution.” Unlike the former and more familiar term, the “industrious revolution” had to do with a transformation in habits of and attitudes toward work. In Bezís-Selfa’s view, the two revolutions were linked in a symbiotic relationship, each one reinforcing the other, with profound consequences not only for the American economy but also for the national culture. And inspiring and propelling the two revolutionary transformations was the coercion of labor juxtaposed against the contradictory secular and religious ideology of liberty and free will. In this sense, *Forging American* is a study of the formation of a type of mentalité. This mentalité, Bezís-Selfa argues, developed alongside, complemented, and reinforced an ideology of revolutionary action that erupted in the American colonies’ struggle for independence from Great Britain and continued long after, extending, according to him, even to the present day.

When Ronald Lewis pioneered the study of slave labor in the colonial South’s heavy industry, few if any historians thought there was much point to looking at the use of slaves in the North’s ironworks. Enslaved workers therefore played only an incidental role in histories of the iron industry of the northern colonies. As Bezís-Selfa demonstrates, their near absence from that historical narrative was a significant error of omission. Slaves worked at virtually every step of the pig and bar iron production processes, including the most highly skilled jobs, and there were undoubtedly many of them. Underlying these conclusions is Bezís-Selfa’s work in the business records of southern and northern ironworks. Most of these records bear the fingerprints of generations of historians who first worked in them, especially the records of the Maryland and Virginia ironworks explored by Ronald Lewis. Still, these records have limitations and, although slaves are known to have constituted the greatest part of the labor force at most ironworks in Maryland and Virginia, the magnitude of their contribution to ironmaking in the North is, notwithstanding Bezís-Selfa’s assertion of their centrality, less certain.

For all the book’s considerable strengths, including the extensive base of research in manuscript sources on which its argument rests, it has some curious and distracting shortcomings. For economic historians the most significant of these problems is the fact that Bezís-Selfa makes virtually no systematic use of quantitative evidence to support the book’s claims concerning the productivity of slave labor and comparisons between free labor and slave labor productivity and work time at specific ironworks. The absence of such data, in the otherwise impressive body of evidence used to reach conclusions about these aspects of iron making would not especially matter, were these aspects of the industry and its labor force not inherently quantitative in nature.

Akin to this deficiency is the problem of Bezís-Selfa’s use of rather nebulous figures to support his argument, particularly his assertion that the colonial iron industry’s workforce included “thousands” of slaves. The basis for this number is nowhere documented. The lack of a more precise figure is particularly regrettable because, essential to Bezís-Selfa’s argument for the vital importance of enslaved labor to the development of the iron industry and to the industrialization of the United States, would be a reasonably firm estimate of the number of enslaved workers and a comparison of how their numbers compared to the numbers of free ironworkers.

*Forging America* is a provocative book, which is more in the way of an argument, in places a polemic, than simply a laying out of a set of findings and conclusions
based on an extensive base of evidence. In places the book far over-reaches its re-
search, nowhere more so than in its brief conclusion, which offers observations con-
cerning recent and current international morality and unsupported assertions of fact
concerning the resonances of the book’s themes into the late nineteenth century, the
twentieth century, and even into the twenty-first. Notwithstanding such occasional
lapses into presentism and polemics, Bezi-Selfa has written a compelling and often
a persuasive book that makes some valuable contributions to our knowledge of the
sociology and culture of iron-making during the colonial and early national periods.

PAUL F. PASKOFF, Louisiana State University

TMI Twenty Five Years Later: The Three Mile Island Nuclear Power Plant Accident

The authors of this work are all associated with Pennsylvania State University,
which maintains a collection and web site (www.libraries.psu.edu/tmi) devoted to
the Three Mile Island (TMI) accident. The work is best described as a brief history
of the accident and its consequences intended for a general reader who wants to learn
a bit—but not too much—about that event. Anyone wishing a more definitive treat-
ment should consult J. Samuel Walker, Three Mile Island (Berkeley: University of
California, 2004). The present volume is based on both primary printed and secon-
dary sources but the authors failed to employ interviews or use any of the rich archi-
val sources available. They also largely ignore the economic literature on either nu-
clear power or the accident.

After a brief preface and introduction, the book contains seven chapters, a conclu-
sion, and four appendices that provide a time line, define terms, and provide facts. It
begins with some basics of nuclear energy and then turns to one chapter on the acci-
dent and one on the cleanup. There is then a chapter on the media, one on the impact
of TMI on the local community, a chapter on its broader impact, and finally a chap-
ter on future energy sources. The writing is usually sprightly but not always; in the
introduction we learn that some TMI information was “rather unknown” (p. x), a
concept which is like “jumbo shrimp.” Two pages later the authors breathlessly tell
us that TMI was “a day that shook our faith in science” (p. xii). More serious are
some organizational problems. The discussion of radiation health effects, rather than
being in with the basics of nuclear energy, is postponed to the material on local im-
acts, and so in the chapter on the accident the reader who learns that there was a re-
lease of 1,200 millirem of radiation per hour will not know if this is a lot or a little.
Similarly, early regulation is not discussed until chapter six.

Perhaps the major failing is the lack of any discussion of how the Atomic Energy
Commission (AEC) or Nuclear Regulatory Commission (NRC) approached the
problem of safety except for one page on the containment building and core rods.
The authors ignore the Davis Besse reactor accident of 1977, and although they
briefly note the Brown’s Ferry accident of 1975, they fail to show its implications for
the AEC or NRC’s theory of safety. The treatment of media coverage would have
been improved had it integrated the literature on risk perception. As it is, the authors
tend to emphasize the technological illiteracy of both reporters and their audience, as
if concern with nuclear power were simply a matter of better education. Thus they
announce that we should “be aware of the risks of technology as well as the trade-
offs” (p. 57). True enough but five pages earlier they told us the industry “simply had not considered this type of accident as a likely event” (p. 52). If the experts do not know the risks how can others? The penultimate chapter on the impact of TMI, while it largely ignores the financial effects, suggests the accident really did lead to change in the industry. Companies set up the Institute for Nuclear Power Operation, an industry-wide safety group. That and changes at the NRC have reduced “scrams” (unplanned shutdowns), which has diminished downtime. Safety and productivity, it seems, went hand in hand.

Although this book provides a useful general introduction to these matters, the authors could have done much more with what they had.

MARK ALDRICH, Smith College


Neil Lanctot has set out to trace the national development of the black baseball business from the Depression through the Civil Rights movement. He does so by relying heavily on primary sources, including interviews with former players, an exhaustive examination of black newspapers and archival sources and court and federal records. The thoroughness of his research is apparent in the 77 pages of endnotes. As a historical overview of the Negro Leagues during this period, Lanctot’s book is a success. As an addition to the economic understanding of this institution, it is a starting point for anyone wishing to continue the research. It is certainly, however, not the final word on the subject.

Though Lanctot has canvassed the existing archival sources in his research, he either found little, or used little economic information. The book is frustrating in its paucity of economic data, despite occasional teasers that Lanctot drops into the odd chapter. For example, he makes a compelling argument that one of the primary obstacles faced by black teams in their attempt at financial success was the lack of adequate playing fields. Most teams could not afford to build their own stadiums, and therefore were reduced to leasing facilities. This proved to be difficult in depression era segregated America. The result was that the best venues and dates were difficult to come by. Lanctot gives a hint as to what might have been when he shows how well these teams drew when they had the advantage of quality parks and lucrative Sunday dates, even outdrawing white professional teams in their own parks. However, he repeatedly frustrates the reader by not citing all of his data sources. Even when the sources are cited, they are not always going to be easy for the future researcher to use. Lanctot does not cite individual items, but rather, puts endnotes at the end of paragraphs. The result can be overwhelming. For example, in the first chapter he discusses salary information for several players (p. 16). At the end of a three-paragraph discussion, the first endnote appears. When flipping to the back of the book, you will be greeted by a list of 17 sources for the three-paragraph discussion, with no indication where any of the information came from.

The overarching problem that Lanctot constantly returns to is the inability of the leagues to form an efficient organizational structure. Unlike the white professional leagues, the owners were never truly able to overcome their own self interests and focus on the good of the league as a whole. As the Negro leagues demonstrate, a cartel is only as strong as its members allow it to be. In the white professional leagues,
the individual owners subsumed their personal interests to those of the league as a whole through a series of rules and agreements that ultimately made the league one of the most successful cartels in American history. The Negro Leagues were never able to do that. Reading the first few chapters, one wonders how the league ever survived, because it certainly seems to have done so in spite of itself.

When the Major League color barrier was finally breached in 1947 with the historic appearance of Jackie Robinson with the Brooklyn Dodgers, the irony was clear: the success of black players in achieving the highest rung of professional baseball would spell the ultimate doom of the Negro Leagues. They were too successful in getting recognized as a legitimate league—their best players were siphoned off by the white major leagues, and their fans followed suit, preferring to follow the exploits of black players in the major leagues to the remaining players in the Negro Leagues. The still shaky organizational aspects of the Negro Leagues did not help matters. Sporadic or nonexistent statistical reporting made it difficult for the fans to know how the players were doing, or even who the best players were. The frequent scheduling of exhibition games on league off days meant that fans, and even players, were not always certain which games counted in the league standings, which were only occasionally reported anyway.

Ultimately, Lanctot argues, Negro League players gained through integration. At its peak, the Negro leagues employed roughly 200 players in the mid 1940s. More than that were employed by the major and minor leagues a decade later. In addition, the standard of living and the possibility of upward player mobility were enhanced. The fans certainly did not mourn the demise of the Negro leagues, as few were attending by the 1950s anyway. What was lost was control of their own sporting life. In the 1950s there were no black managers or executives in organized white ball. Even half a century later there are few African Americans in these positions.

Although Lanctot leaves unanswered many questions economists would love to explore, he does provide a rich and thorough background for anyone looking to study this important but largely overlooked institution in African American history. Despite the reservations I have expressed, this book will be a welcome addition to my library.

MICHAEL HAUPERT, University of Wisconsin – La Crosse


This volume is the latest contribution in what is surely a life’s work concerning the history of American inward and outward investment. This particular history carries all the markings of Mira Wilkins’s great talents that we know from her earlier studies. She prefers rich description, filled with many details and facts. This litany would teeter towards the tedious, but Wilkins knows well the importance of adding periodic moments of drama. At the end of this prodigious study, the student of this book has no doubt that he or she has engorged a consummate history of direct investment in the United States.

The protagonist of this history is America the emergent, though the story is not always as pristine as one may have thought. World War I transforms the United States from a debtor to a creditor nation. Although the United States had even prior to the Great War been a net exporter of foreign direct investment, it now has become
a net exporter of portfolio investments as well. There are two reasons for this change. First, the immiseration of Europe following the war made capital less abundant and, secondly, the U.S. advance in productivity made it harder for foreign firms to compete.

Wilkins does not attempt to sort out the relative importance of either of these conditions. Rather, her focus is on a few important and intriguing subjects. The principal subject is the treatment of foreign property during war, for the chosen dates of her inquiry begin with the First and ends with the Second World War. During World War I, foreign property had been confiscated and assigned to American owners. German firms found it difficult afterwards to recover their capital, brand labels, and intellectual property. Nor was the procedure simply complicated by law and bureaucracy; the process was also hampered by corruption, a reminder that the administration of Warren Harding did not meet the hygienic standards assumed today to be associated with the federal government.

Given this experience and the imminent signs of American entry into war, how should German—not to mention Japanese and Italian—companies behave in the period of 1939 to 1941? It is hardly surprising that when possible, they behaved in ways to protect their property. Thus, I.G. Farben—which Wilkins describes at length in earlier chapters as the intellectual powerhouse of the chemical industry—sought by a “sham transaction” to swap American for foreign assets with an American company Jasco, with the secret clause that all could be reversed at a later date. Wilkins does not let us know much about Jasco’s American owners, Standard Oil, and their thoughts. When war broke out, the U.S. government forced Jasco to release its patents for exploitation by other firms.

The complications of ownership during war and hostility are known throughout all periods of history and are surely harbingers of the current and far more sophisticated search for the “money trail” of suspicious investments. Did, for example, Japanese insurance companies operating in the United States pass on information regarding the arrivals and departure of American ships from ports—information which they would know? An investigation found no evidence that their American representatives passed on such information. The evidence regarding German and Swiss insurers was far less certain. In particular, Wilkins does not leave clear in this account or subsequent ones what Swiss firms knew, a topic of some importance in light of the controversies of the past decade. One is similarly left with footnotes and references regarding the behavior of the Enskilda Banken (and its Swedish owners the Wallenberg family) to piece together the implication that there was something fishy in the Baltic.

The story—stories would be more accurate—of the disposition of foreign assets in the United States is not, however, limited only to the hostile powers. The eventual American allies, Britain and France, also sold their portfolio holdings. A somewhat brutish Secretary of the Treasury Henry Morgenthau, and a similarly inclined President Roosevelt were insistent on the sale of British direct investment as well to satisfy the American isolationists that before aid was to be given, the British had done all they could. Indeed, a few companies, American Viscose—owned by Courtaulds—being the most prominent, were sold, before common sense and perhaps a collective guilt settled in.

The war experience had also far-reaching consequences. Many foreign firms from neutral countries succeeded in maintaining their assets in the United States because of their legal organization by trust; the trust form permitted affiliates to assert they were independent of parents who may have been in close relationships with the
Germans. Such was the case for SKF Industries (a Swedish ball-bearing manufacturer) and even Philips (the Dutch electronics multinational). After the war, both firms chose to maintain their trust forms, partly as a way to confirm this separation. Of course, the re-affirmation of these affiliate structures became the late lore of management school teaching on the conflict of national structures and global markets.

In addition to treatment of foreign companies during war, the book has two minor themes. The first is the importance of the growing network of finance and investment in the world economy. One of the achievements of the book is to balance the traditional emphasis on manufacturing with descriptions of agriculture and services, especially in financial sectors. In a book generally averse to allocating too much time to theories, Wilkins devotes a considerable number of pages to show the many ways in which direct investment and portfolio investment can intertwine and render obscure the national origins of firms and portfolio investors. This confusion is, of course, the basis for the travails of the American authorities later in deciphering who owned what during the war.

The ascension of the United States placed New York as a principal node in a world network of capital. From this study, it is hard to evaluate the exact nature of this network. By the lists of foreign banks, insurers, and other financial firms, there is no doubt that New York had become an international hub. But whether it challenged London is not analyzed, partly because Wilkins focuses on inward investment and does not compare the foreign position in the United States to the American position, say, in London.

The second theme is the importance of politics and the state. Wilkins makes clear in early chapters that the United States was not a liberal haven for foreign capital. Foreign investment was restricted in communication, transportation, and banking, among other industries. Where federal law did not restrict such investments, state laws did—though it should be recalled that state laws in banking impeded even cross-state banking. Because of federal laws, many firms exited the United States, including German and Japanese companies due to war, British breweries due to Prohibition, Marconi due to communication regulation, and in the case of Courtauld, due to duress. In addition, American antitrust law was far more aggressive than the cartel-friendly law of Europe. The United States increasingly under Roosevelt sought to put back teeth into the Sherman Act. Of great importance, the increases of corporate and personal income taxes made the state a major even if passive residual claimant.

The hegemony of the United States at the end of World War II was surely as much military as it was financial. In many ways, its ascendency masked that the United States had taken the massive lead forward in productivity, incomes, and production during the first quarter of the century. The world wars made the dollar into an international reserve currency, and the United States became the major creditor to other nations. It took a decade, but by the 1950s—we know from other studies, the United States had come to understand that power and economic liberalism were the handmaids of hegemony; Bismarck had made no less a comment in a different century regarding the United Kingdom. It was forgotten that the United States of the 1930s was deeply worried about “hot money”, as Wilkins describes in detail and with the aid of the rare graphs showing the volatility of inward and outward flows. In this debate appear well known names such as Henry Morgenthau and also William Douglas, head of the SEC and later Supreme Court Justice.

There are many hidden treasures in the book—the metaphor is apt as one does fall upon them in a way that a child might wander upon a pirate’s lair. For example, at
the end of chapter 5, Wilkins discusses the continued confusion over the statistical definitions of foreign direct investment: in shipping, 75 percent equity ownership was required; for radio, 80 percent; aircraft, 51 percent. These numbers are far above the 10 percent that came later to prevail. This variation reflects many things, but above all, it reflects the wide variation in categorization of emergent social phenomena. This type of confusion is reflected in general in the history of economic statistics and is of interest because the final convergence in definition reflects an arbitrage of cognition and power. After all, it is not a minor difference to judge whether an industry is foreign-dominated when using a definition of 10 percent or 80 percent! Many of these definitions came to light from the 1941 Treasury survey of foreign investment in the United States motivated by the need to know the national ownership of these assets. This material is a sociological sandbox in which the statistical categories come to define our subsequent cognition about what is foreign and what is domestic. No surprise then that politics and statistics are often bedmates.

There is a cost to Wilkins’s narrative, as there would be for any history. The size of the project demands trade-offs. By focusing on chronology that is divided into unequal panels, we lose the rhythm of daily time and life. To recover, for example, the remarkable history of Ivar Kreuger, the Swedish match king, one has to recover the collage from the various chapters. There is a loss not only of drama, but at times, of sense making.

One suspects that Mira Wilkins is not as oblivious to these considerations as she is dismissive. She occasionally mentions theory, but not too often; she occasionally mentions hypotheses, such as whether foreign investments “caused” the Great Depression, but she dismisses them largely—as would anyone confronting such unqualified statements; she states that she does not doubt that her period shows considerable technology sharing, but chooses not to regard the studies on these phenomena; she caricatures the view that direct investment is one-way, or sectoral rather than multidirectional as she has shown; she notes the world looked more global in 1914 than in 1945, but does not enter directly into this arena now fairly well studied.

For her, much like a French poet, it is the music above all that counts and counts she does. The reader is bound to ask over 600 pages: why am I reading so many pages about company entries, exits, investments? Yet, there emerges an answer and it is a very compelling one, for behind these names of companies and people lie more than just dollars, sterling, mark.

The amounts of direct investment in the United States by today’s standard were not very high, measuring from one to just under five percent of American GNP during this period. We might be puzzled by the weight of this superb book and the relative unimportance of inward direct investment. But the numbers do not capture the personal histories and the vestiges that lie embryonic, waiting for the clock hands to turn. When the U.S. hegemony began to weaken, and the capabilities and financial reserves of foreign countries inevitably improved, how rapidly did the United States turn from creditor to debtor. No doubt, the macroeconomic and geopolitical mistakes of the United States deserve their share of the credit. Yet, this cannot explain it all. What allowed history to turn so rapidly were these small histories of companies and people who persisted in their American investments and adventures, absorbing the local knowledge, developing their technologies, and understanding the markets.

For history, time is indeed an arrow. The United States may have for a rare number of decades been able to ride above the rest, but in the details of everyday life, the world had already changed and become considerably smaller and more multina-

Alison Isenberg’s Downtown America chronicles the tumultuous path of development, decline, and in some cases redevelopment, followed by central business districts in American cities over the course of the twentieth century. This path has formed a central or peripheral theme of many previous books, including Kenneth T. Jackson’s widely acclaimed Crabgrass Frontier: The Suburbanization of the United States (Oxford: Oxford University Press, 1985). Isenberg’s book, national in scope yet local in emphasis, complements this earlier work by focusing on the human dramas that unfolded in the face of the century’s inexorable economic changes.

Downtown America distinguishes itself from previous works in several respects. It focuses almost exclusively on retail trade, devoting little or no space to the role of central districts as residential neighborhoods or hubs of commerce. The book’s scope is also limited historically, beginning its narrative at the dawn of the twentieth century when central business districts were already well established in many cities. Although the book contains some discussion of public policy, most notably zoning laws and mid-century urban renewal efforts, the primary emphasis is on the local community organizations, small-scale entrepreneurs, and national retailing powers that shaped and reshaped centralized retail trade. Relatedly, the book has relatively few references to mayors or other politicians; instead Progressive Era urban planners, Main Street retail magnates, appraisers, civil rights demonstrators, and real estate developers populate the pages and copious figures. The index contains references to W. T. Grant but not Community Development Block Grants; to Rich’s Department Store but not Richard Nixon. Isenberg explicitly intends to pay less attention to the impersonal forces, such as the rise of the automobile, that quite literally drove downtown America on its twentieth-century path, and more attention to the individuals and societal groups, defined most conspicuously along race and gender lines, that interplayed with these forces.

We learn of the prominent role that women’s civic groups played in rallying public support for infrastructural and aesthetic improvements downtown, and businessmen’s gradual realization that these proposed improvements could actually comprise a profitable investment. In a later chapter, we learn that women, as housewives who made most consumption decisions in their households, influenced the location decisions of many national chain stores, who drove up property values in areas with heavy mid-day pedestrian traffic. Still later, Isenberg recounts many postwar laments regarding the increase in both wives’ labor-force participation and housewives’ tendency to travel by car. Both innovations acted to increase the opportunity cost of women’s time. Coupled with the increasing tendency for affluent families to live at some distance from the central business district, these trends boded ill for the success of Main Street retailers.

From an early stage, downtown districts struggled with the management of racial tension. Isenberg discusses early efforts to restrict racial intermingling through zon-
ing laws, and later practices of ignoring the retail needs and preferences of proximate black shoppers in deference to those of suburban housewives. Isenberg devotes an entire chapter to the prominent role played by downtown merchants in the Civil Rights era. This fascinating narrative compellingly describes the difficult situation faced by these business owners, who often faced simultaneous demonstrations or boycotts by integrationists and segregationists alike. The author follows this discussion with a thoughtful analysis of the 1960s riots, identifying the tendency to cite white store owners as partly responsible for the destruction visited upon them by black rioters as an early instance of victim blaming.

*Downtown America* contains insights well beyond the standard modern discussion of race and gender implications. Isenberg devotes a chapter to the analysis of idealized images of early downtowns portrayed in picture postcards. These romanticized visions of uncrowded, uncluttered, well-maintained streets foreshadowed the suburban shopping centers that would later deprive Main Street of its wealthiest customers. The book also chronicles the difficult process by which architects and real estate developers came to realize that their continuous efforts to modernize and renew central business districts, which began in the depression era and continued through postwar decentralization, may have destroyed rather than created value. The commercial potential of historic preservation went unrealized for many years, before the successful development of destinations such as San Francisco’s Ghirardelli Square and Boston’s Faneuil Hall pointed the direction toward a profitable formula.

*Downtown America* occupies an interesting intellectual intersection. In contrast to many other entries in the University of Chicago Press’s Historical Studies of Urban America, it is national in scope, drawing on the experiences of countless American cities both large and small. These experiences are drawn together not by their reflection of common broad societal trends, but by a commonality of actors who either helped to create these trends or responded to them. It is a large picture painted with a fine brush. Scholars and students of urban economics and urban history will find it an interesting read.

**JACOB L. VIGDOR, Duke University**


“The Origins of the Industrial Revolution in the United States” grew out of Pierre Gervais’s French doctoral thesis. It goes a small way toward righting the balance of trade in the field, there being far more research on European topics by North American scholars than the other way around. Having long added to the former total, this reviewer claims more linguistic facility than expertise on the American case, despite living in one of a number of regional contenders for the title of “cradle of American industrialization.”

Gervais begins by reviewing the theory of industrialization and is critical of what he identifies as opposing conventional views. One can be characterized, or perhaps caricatured, as Take-off + Gadgets, the other as Industrial Evolution: many causes + too gradual to date. He gives more credit to two other strains of analysis. The first goes back to Karl Polanyi and stresses the commoditization of labor, i.e., the growth of the population entirely dependent on paid employment. The second blends Jan de
Vries’s Industrious Revolution with Tony Wrigley’s “organic” economy and focuses attention on the immediate prefactory system. It should also be said that Marx is a not-so-ghostly presence in all this.

At any rate, the core of the work consists of an analysis of the market economy as it waxed and waned in a small area of central New Jersey (Trenton and Mercer County) in the first half of the nineteenth century. Actually, the term “mercantile economy” (économie marchande), found in the subtitle but strangely absent from the text, is more faithful to Gervais’s thesis. He sees the late prefactory economy as totally dominated by merchants, because both landholding and direct production were too fragmented and dependent to constitute a countervailing force. Though the point is not made here, the model cannot easily fit the American South or Britain (among others), given their wealthy and high-status landowners. One consequence of the position is that the genesis of American industrialization as described here is more about trade and transport than about industrial production per se.

Although it may be true that most fortunes in the North originated in trade, Gervais no doubt exaggerates the economic power of the leading merchants, attributing potential profits to them that go rhetorically beyond what even shared monopoly could extract. But I do not want to dwell on the theoretical imprecision, for two reasons. One is that the idea of merchants controlling access to markets (they also dominated the evolving system of turnpikes, canals, steamship lines, and railroads) is one worth retaining. The second is that Gervais confronts an awkward fact: merchants did not actually extract all the profit they could, any more than they competed hard with one another. The reticence to gouge producers (and consumers) he ascribes to nonmarket—political and social—constraints, though without much evidence or detail in the argument. On the other hand, the “class solidarity” among merchants that kept shared monopoly stable in trade and transport gets more emphasis, complete with lots of family alliances and “Greifian” networks (disguised at the time by dummy corporations and other legal and accounting tricks).

So long as trade was king, productivity in production remained unimportant, so goes the argument. Only when goods from outside sources, foreign and domestic, threatened to sweep away the cozy control merchants exercised did that focus change. Only then, therefore, did the cumulative “Schumpeterian” processes of innovation and growth, scale and capital deepening, labor exploitation and price competition take hold in earnest and supplant Smithian growth. Tellingly, merchants led or joined the movement, many becoming major industrial entrepreneurs. On this showing, then, industrialization took place in two successive phases or systems, which Gervais, following F. Braudel, designates by the terms “market (or mercantile) economy” and “capitalism.” By implication, each was integral to the overall process, and the market economy, in particular, should be looked at more closely than terms such as “pre-conditions” imply.

On grounds of both doubt and ignorance, I leave judgment of Gervais’s model in this regional application to specialists. The later stages of the story are only sketched out, including the actual shift to more production- and productivity-oriented industrial (and primary) sectors and the epoch-making move to factory wage labor. Yet my limited study of the upper Hudson Valley in the same period has also led me to the conclusion that industrialization only took over when trade became less profitable. In fact, the same succession characterized European urban economies in the pre- and proto-industrial periods. I also agree that it is important to stress how different the Atlantic economies of 1750 were from their late Renaissance counterparts.
while, apart from limited regions of England and Belgium, as late as the 1840s these same economies looked more like those of 1750 than of 1900.

The book combines close archival study of industries, firms, and entrepreneurs in a small region with a vigorously argued conceptual framework and is thus well worth reading. I hope it will soon be translated. It would also be time, perhaps, for a full-dress synthesis of the distinctive features of antebellum American industrialization, building on the growing number of case studies (Trenton, Paterson, Chicopee, Lowell, and so on) and going beyond the mere ten pages devoted to the subject in volume 2 of the Cambridge Economic History (S. L. Engerman and R.E. Gallman, eds. Cambridge: Cambridge University Press, 2000, pp. 369–79).

PAUL M. HOHENBERG, Rensselaer Polytechnic Institute (emeritus)


Michael J. Connolly’s clearly written monograph advances an important thesis about early American railroad development. Unlike social historians who sometimes divide the Early Republic between “capitalists” and “non-capitalists,” Connolly argues that political factions of almost every stripe supported markets and commerce. Borrowing from Joseph Schumpeter, he argues that the real debate centered on “liberal capitalism” dominated by small-scale entrepreneurs and “illiberal capitalism” focused on politically privileged corporations. Jacksonian Democrats, Connolly argues, opposed railroads on grounds that it would endanger liberal capitalism, while “Whigs never worried over illiberal capitalism. If anything, they welcomed it” (p. 190).

Connolly does not cover all of New England—he instead focuses on New Hampshire and Essex County, Massachusetts. Such limited geographic coverage sometimes makes Connolly’s broader claims about “Jacksonian America” unconvincing, but it gives him the ability to carefully analyze policy debates. He shows that radical Democrats often viewed railroads with hostility and suspicion because they threatened the precarious divide between private interests and public power. In 1840, for example, New Hampshire Democrats stripped railroads of their eminent domain powers, forcing the corporations to negotiate with individual landowners. Dissenting Democrats and their Whig allies argued that the public benefits of railroads (improved transportation, improved trade, and so forth) justified grants of public power, whether in the form of eminent domain privileges or government subsidies. The Whig position eventually prevailed—in part because fierce commercial rivalries created strong support for railroads—but continued Democratic opposition nevertheless showed that the victory of the railroad corporation was hardly complete.

Connolly excels at highlighting the complex ideological positions on the railroad taken during the Jacksonian era. He is particularly adept at analyzing divides within parties. In one particularly fascinating divide, “Vested Right Whigs” ended up opposing new railroads because such ventures threatened the economic vitality of older works and would spark unhealthy speculation. “Opportunity Whigs,” on the other hand, strongly supported more railroads and the competition they fostered. Not surprisingly, “Opportunity Whigs” found strong support in towns that had been bypassed by the earliest companies. The “Opportunity Whigs” triumphed, especially in Essex County, Massachusetts, which developed one of the densest railroad networks in the country.
The division between “Vested Right Whigs” (those with clear connections to older enterprises) and “Opportunity Whigs” (those who stood to benefit from new enterprises) highlights the important relationship between economic interests and political ideology. Although Connolly does not ignore the interplay between interest and ideology, analysis of the railroad companies themselves would have added more nuance and depth to the study. Connelly’s evidence is drawn largely from newspapers, speeches, and correspondence; the bibliography does not list the papers of a single railroad or even their annual reports. The basic questions regarding the profitability of roads or how much the companies paid to settle land disputes are not asked, much less answered. Although Connolly uses basic quantitative evidence on population and industrial production to chart the impact of railroads, his conclusion that railroads helped some communities and hurt others is rather unremarkable. The book is clearly written, but the lack of detailed railroad maps makes it hard to follow the detailed political battles between rival lines.

Connolly concludes that the Whig support of “illiberal capitalism” showed a lack of economic sophistication. If the Whig boosters who saw railroads an economic panacea were simplistic, so, too, were Jacksonian Democrats, who feared that railroads would end innovation and entrepreneurship. In this sense, Connolly’s use of “illiberal capitalism” is too static to describe New England’s fast-changing economy. Even railroads, despite their considerable economic and political power, would themselves eventually succumb to Schumpeterian “creative destruction.”

JOHN MAJEWSKI, University of California, Santa Barbara


Atlantic Virginia addresses the multiple roles played by colony residents living on the Eastern Shore, the Southside, and the Northern Neck during the seventeenth century. These colonists differed from their wealthier neighbors, the planters of the peninsulas between the James and the Rappahannock Rivers whose soils permitted them to specialize in raising sweet-scented tobacco for the luxury market in England. These men formed a separate and distinct interest group in Virginia’s political economy, and their activities have dominated historians’ visions of the colony. April Lee Hatfield seeks to call attention to the coastal and Caribbean trading activities and religious affiliations of those other Virginians.

The first and last chapters describe the boundaries and communication routes of various Indian tribal territories within and beyond Virginia, inter-Indian relations, and Indian-European relations at the beginning and end of the century. The contrast between the two time periods is striking, most importantly for the sharp decline in the power and numbers of the coastal Algonquians and the countervailing rise and expansion of the Iroquois Five Nations. The English empire in America followed a parallel track. Early in the century, the colonists were afraid of the Spanish; by the middle of the century, they were challenging the Dutch for mercantile dominance at sea; at the end of the century, they were fighting the French for half a continent.

Over the course of the same century, the ships and mariners of nonpeninsular Virginians did business with the Dutch of New Amsterdam, the Puritans of New England, and the merchants and planters of the sugar colonies. Missionaries of dissenting sects circulated through all the English colonies and found especially
sympathetic audiences on the Chesapeake’s Eastern Shore. The outlook of these Virginians was Atlantic-wide, not parochial, and their religious and economic interests focused less on England than on their trading partners in the other colonies, including those in Barbados and New England. Indeed, many of these maritime Virginians had immigrated from those places, especially Barbados, bringing dissenting values and the knowledge gained from their broader experiences to the insular world of tobacco plantations.

Perhaps the most interesting chapter of Atlantic Virginia concerns the rise of slavery in the English and Dutch colonies as an economic and political institution. Hatfield draws on the rich scholarship concerning the Atlantic slave trade that has appeared in the past few years to retell the story from Virginia’s perspective. Insofar as published data permit, she attempts to track the geographical origins and regional distribution of the African population in Virginia over the course of the century. As has long been known, most were creoles who came in small lots from the Caribbean until the final two decades when the Royal African Company and its competitors began delivering entire shiploads from the coast of West Africa by way of Barbados. Although she offers no numbers to support her case, Hatfield argues that extensive contacts with Caribbean ports put nonpeninsular Virginians at an advantage for acquiring seasoned slaves when the supply of indentured servants began drying up in the last quarter of the century. The bottom was falling out of the market for low-quality tobacco at the same time that large cargos of Africans began arriving in the late 1680s, allowing growers of sweet-scented, for which demand remained high, to buy slaves directly off ship-board. Their wealth and influence expanded in the eighteenth century while Eastern shore residents found their proportion of intercolonial shipping falling as rival ports elsewhere on the continent expanded in number and capacity.

Although the overall outline of Virginia’s rise as a slave society will not be changed by Hatfield’s work, she has rightfully alerted historians to the importance of transatlantic and intercolonial bonds to that story. Without better data, however, readers will remain unpersuaded that external bonds superceded the internal forces described in Edmund S. Morgan’s American Slavery, American Freedom: The Ordeal of Colonial Virginia (New York: W. W. Norton, 1975) or the area’s persistent Englishness, as argued by James Horn in Adapting to a New World: English Society in the Seventeenth-Century Chesapeake (Chapel Hill: University of North Carolina Press, 1994).

GLORIA L. MAIN, University of Colorado


In this volume Robert Higgs has compiled a set of his essays written over the last 20 years. They all present arguments against the growth and misuse of government power in the United States. A majority of the essays come from his column that he writes as editor of The Independent Review: A Journal of Political Economy. The rest were previously published in a wide range of publications from Critical Review to Reason Magazine. Although Higgs is a well known economic historian, he has explicitly chosen essays for this volume that are written more for the general public. He also promises a subsequent volume of his more scholarly writings.
Higgs takes on a wide range of government interventions that he considers inappropriate, ranging from the draft to income redistribution programs. He also criticizes the military and defense establishment for its inordinate power in American politics and even finds time to disagree with the rankings given the U.S. presidents by historians. Several essays are shortened and more-popularized versions of his major work on the growth of government, *Crisis and Leviathan: Critical Episodes in the Growth of American Government* (New York: Oxford University Press, 1987).

Higgs is a thoughtful and scholarly libertarian so, as one might expect, his essays are cogent critiques of government and defenses of a free society. Because this is a book of previously published editorials and essays, one does not find, nor should one expect, a sustained argument that builds from beginning to end. Instead, one finds a set of separate pieces, some quite polemic, others more subtle, but all aimed at disabusing the reader of the usefulness of government. Higgs is an excellent writer and one finds pithy insights, numerous well turned phrases, and telling arguments against government. Despite the brevity of each essay Higgs draws upon his background as an economic historian to present evidence from history and logic from Public Choice and Austrian economics.

At times, Higgs’s language seems a bit strong, such as when he describes the United States as a “monstrous police state” (p. 308). However, it becomes clear that Higgs believes that such terminology accurately describes the society in which Americans live. He continually refers to government as fraudulent, unconstitutional, and all powerful. As one reads through the various essays one wonders if Higgs sees any positive role for government and eventually one discovers that the answer is no. In an essay (first published in 2002) a third of the way through the book, he says: “When I was younger and even more ignorant than I am today, I believed that government (understood conventionally as a monopoly of legitimately coercive force in a given territory) performs an essential function—namely the protection of individuals from the aggressions of others, . . . and that no other institution can perform this function successfully. . . . I am now more inclined to disbelieve the idea than to believe it. More and more, the proposition strikes me as almost preposterous.” (p. 101).

It might have been helpful for the reader if this essay had appeared at the beginning of the volume as it would have clarified Higgs’s position earlier on. Nevertheless, it is useful to know that he is arguing against all functions of government and finds even the minimal protective functions defended by some libertarians as better performed by private agencies. Higgs does not develop a theory of nongovernment, and one is left wondering exactly how his world of anarchy would function. But it is clear that he opposes every modern use of government in societies such as the United States.

There is some repetition in the book because much of his work has concentrated on the role of economic and military crises as significant influences in the growth of government. However, Higgs also sees changes in ideology as foundational for explaining the growth of government. He ties his theory of ideological change to the desire by citizens to have government simply “do something” during periods of economic crisis and wartime. Higgs presents numerous examples from U.S. history where the desire for solutions from the body politic allowed special interests to capture and use government for their own ends.

If one wants a series of well written and carefully argued, but quite polemic criticisms of modern government, this is a volume to which one should turn. Because it is a set of independently composed essays, one does not have to read through the book from beginning to end. Each essay stands by itself, so one can selectively
choose topics and issues as one wishes and not miss the major thrust of any of his arguments. My favorites were some of the longer ones, a critique of the Food and Drug Administration (chapter 9), and of special interest influence on defense spending (chapter 29). Both point out the difficulty of limiting bureaucrats and elected politicians to the provision of public goods, and are well argued and supported by numerous case studies. I found the form of argumentation less powerful in the shorter essays, but recognize the constraints of editorial columns from which most of these short pieces are drawn.

PETER J. HILL, Wheaton College

GENERAL AND MISCELLANEOUS


The papers contained in *Life under Pressure* report work on local population analyses carried out on data from Sweden, Belgium, Italy, Japan, and China’s Liaodong peninsula within the framework of the Eurasia Population and Family History Project. They are designed to test one of the conceptual foundations of historical demographic theory, the distinction between high- and low-pressure demographic regimes and their identification with the population patterns of east Asia and western Europe respectively. Like so much else in demographic theory, the origin of these ideas is conventionally traced back to Malthus. They are rooted in classical political economy’s dismal conviction that mass living standards would inevitably fall as population grew until either the death rate increased or the birth rate fell so as to bring the system back into equilibrium. For present day demographic theory these two mechanisms characterize high- and low-pressure regimes respectively, and it is a basic assumption that the latter were effectively confined to western Europe whose distinctive marriage patterns kept fertility low and responsive to changing economic conditions; elsewhere—above all in the major Asian population centers—early and universal marriage kept birth rates inflexibly high and high-pressure demographic regimes prevailed as a result.

These assumptions underpin much of the interpretative work on the economic consequences of demographic variation undertaken by writers such as E.A. Wrigley, but influential as this work has been, their basic presuppositions have received little empirical examination. The main difficulty has been the shortage of historical Asian data of a scale or quality comparable to that available from western Europe, but analytical problems are involved as well. It is no good simply to compare death rates because these may vary due to noneconomic epidemiological factors. In principal it would be possible to track long-term movements in vital rates and correlate them with changing living standards in different regions, but data problems often make this very difficult in practice.

One widely adopted, less evidentially demanding, alternative to the method of secular correlation is the analysis of short-run associations between movements in aggregate vital events and those in staple food prices. The logic here is that, where high-pressure regimes prevail, living standards should be too low to allow for much accumulation of resources and so the general population will have little to fall back
on in unusually hard times. Major increases in food prices should therefore reduce mass consumption almost immediately on a scale sufficient to compromise resistance to life-threatening infections, and the correlation between movements in prices and in total burials should be immediate and fairly strong. Conversely, in low pressure regimes, where there is more scope for accumulation, the impact of prices will be smaller and mediated through the effects of consequential social disruption on exposure to infection. Serial correlations between prices and deaths should therefore be weaker and lagged over a longer period.

Such analyses require only aggregate vital data and annual price series, which are relatively widely available, but even here there are problems. Aggregate correlations are a relatively blunt instrument, which may well obscure the experience of particularly “harvest sensitive” minorities, and there is always a risk that the confounding effects of climate on both harvests and the transmission of infection will distort the results. The authors of Life under Pressure largely avoid these pitfalls by using longitudinal nominal data of a kind that allows the measurement of age-specific mortality rates and the reconstitution of household relationships for periods of a century or more. The beauty of this arrangement is that it allows separate analyses to be undertaken for households with different characteristics and for individuals in different structural positions within them, as well as the familiar distinctions according to age and sex. The effects of life events such as widow- and orphan-hood, or even divorce, on mortality can also be studied alongside the impact of price fluctuations.

Nevertheless, if the conduct of such analyses is a science, their interpretation is an art requiring contextual sensitivity and local knowledge, without which reader and author alike risk being swamped in a sea of coefficients of varying statistical significance. Most of the contributions avoid this risk, and the best are very good indeed. The chapters are organized into three sections: “Comparative Geographies,” which examines differences in economic, familial, and demographic variables and in their inter-relationships between the five regions; “Local Histories,” which examines each region in turn; and “Comparative Demographies,” which focuses on age- and sex-specific effects—followed by a general concluding chapter that concentrates on the problem of agency in relationship to large-scale demographic variation.

The pattern that emerges from all this is complex and sometimes difficult to interpret, but two general features stand out. The first is the importance of household variables and relationships in determining the vulnerability of their members to fluctuating food prices even, or perhaps especially, though the implications of any one configuration may vary greatly between regions. The second is the need to reinterpret many commonly accepted high-level generalizations concerning the divergence between “East” and “West.” In particular, there proves to be remarkably little evidence of systematically higher mortality or lower living standards in the East before the later nineteenth century. Perhaps the most intriguing finding is that households’ vulnerability to food price fluctuations was actually greater among the European communities studied than it was in Asia. The authors interpret this finding in terms of the differing functions of the state in the two cases: the protection of property in the west and the preservation of stability in the east.

JOHN LANDERS, All Souls College, Oxford

World Economy Historical Statistics is the self-described “companion volume” to Maddison’s World Economy: A Millennial Perspective, Paris: OECD, 2001. The Millennial edition is the latest of the author’s long series of highly influential books documenting world income growth. World Economy: Historical Statistics brings this work into the information age of the twenty-first century by extending the data to 2003 and updating some entries. More importantly, this work provides the data and text in a machine-readable form on a single, portable CD. In this new format, this publication will be an indispensable resource for any reference collection of economic data on electronic media.

The publication includes two parts. The first part is an excel file containing total income, population, and income per capita data for 165 countries over periods ranging from 1500AD to the present. In addition to the national data, Maddison presents estimates for major regions of the globe, including Western Europe, the Western Offshoots (Australia, New Zealand, Canada, and the United States), Eastern Europe, Successor Republics of the USSR, Latin America, East Asia, West Asia, and Africa. Estimates for the world as a whole are also reported for key benchmark years from 1500 on. The second part is 273 pages of text in ten English-language pdf files that briefly discuss and more comprehensively document how Maddison created and assembled the income data in each major region. This text is also available in a single French-language pdf file. Tables in the pdf files report for interested readers additional “conjectural” estimates of population and income (measured in 1990 international Geary-Khamis dollars) for Egypt, Morocco, and other parts of Africa in the years 1AD and 1000AD. This should give a sense of the sweeping coverage of this publication.

My hope is that users of the CD will download and read the pdf files. They will learn about the pioneers of macro-measurement and read Maddison’s thumbnail sketches of the development process in the major regions. They will then study his careful descriptions of the sources and methods that he used to generate his estimates, including those he labels “conjectures.” Thus prepared, the readers will have a better sense of what we know and how well. Future researchers will use such information to build on, critique, refine, and in some cases, replace the current numbers. The new CD does an excellent service by putting this detailed documentation at a computer user’s fingertips.

My fear is that users of the CD will never open these pdf files, and instead immediately push the button to download the excel spreadsheets containing the income and population data. Such is the hunger for numbers, any numbers, as long as they can be labeled the “best available.” As one who is skeptical of, yet interested in, research using panels of cross-county income estimates to tease out the determinants of economic growth, I worry that the easy access to the data on this CD will only encourage and enable researchers to “see what the numbers show.” I worry such users will ignore that the estimates come, in many cases, with wide, unspecified error bands. The audience (and editors and referees) will have to retain and rigorously exercise their judgment.

I did find the data extremely easy to access and highly useful. The pdfs, however, lacked an index or search function that would have allowed pinpointing relevant material. Finally, out of concern about how these data will be used, I will step close to the line set out in this Journal’s instructions to book reviewers against using valu-
able journal space to point out “minor errors of fact.” In a handful of cases (more specifically for the Asian aggregate before 1800), total income as published did not equal population times per capita income. The reason for this discrepancy is not clear from the excel file.

To conclude, Angus Maddison does a great service making his important work available to researchers in this electronic format. This CD will be an invaluable resource in any scholarly reference collection on economic growth and development.

PAUL W. RHODE, University of North Carolina, Chapel Hill