

THOMAS PIKETTY. *Capital in the Twenty-First Century*. Translated by ARTHUR GOLDHAMMER. Cambridge, Mass.: Belknap Press of Harvard University Press, 2014. Pp. viii, 685. \$39.95.

It is difficult to think of a recent book by a social scientist, and impossible to think of one by an economist, that is of as much potential interest to historians as Thomas Piketty's *Capital in the Twenty-First Century*. Its central question is an inherently historical one about the relationship between capital accumulation and inequality in the very long run. And the theory that Piketty proposes by way of an answer—that rising inequality is inherent to the dynamics of capitalism—depends for its persuasiveness on the historical analysis he draws on to substantiate it. The book also deserves historians' attention for Piketty's admonishment of economists for "their absurd claim to greater scientific legitimacy, despite the fact that they know almost nothing about anything" (p. 32), and his enthusiasm for the study of history as an antidote. Indeed, in Piketty's mind, his book is "as much a work of history as of economics" (p. 33).

Certainly historians will learn a great deal from the impressive research program that Thomas Piketty, Emmanuel Saez, Anthony Atkinson, and others have undertaken on the history of inequality. Yet if Piketty had wanted to write a book that was just about inequality, he would not have called it "*Capital*." He has bigger fish to fry—no less than the relationship between economic growth, capital accumulation, and inequality—but the book disappoints when it comes to linking its larger claims to historical analysis.

The crucial question that Piketty addresses is whether, in the process of economic development, the convergence or divergence of incomes and wealth dominates. Piketty argues that the "lessons of history" reveal capitalism's structural tendency to generate higher levels of inequality over time, belying the claims of optimists embodied in the so-called Kuznets curve, that inequality increases during the early stage of economic growth but declines later on. Instead, what Piketty describes as "the fundamental force for divergence" kicks in when the economy grows slowly—when the growth rate (g) is lower than the return on capital (r)—which he claims is the rule in capitalism. That means that over time the capital stock takes on "disproportionate importance" relative to economic output and returns to capitalists increase relative to returns to labor.

Most of *Capital in the Twenty-First Century* is taken up with an analysis of historical trends to support the book's controversial claim that capitalism breeds inequality. Piketty begins with economic growth, claiming that, despite "the spectacular increase in standards of living since the Industrial Revolution" (p. 87), growth rates will decline in the future. He contends that population growth "explains" half of the economic growth that has occurred in the world since the beginning of the nineteenth century, and suggests the implausibility of

equally high rates of population growth in the future. Yet his analysis elides the complexity of the historical relationship between population and economic growth; as Piketty's nemesis, Simon Kuznets, pointed out many years ago, the historical association between population growth and economic growth is loose over time and across countries and, even when it exists, does not necessarily imply causation (Kuznets, "Population and Economic Growth," *Proceedings of the American Philosophical Society* 111, no. 3 [1967]: 170–193). It is for this reason that historians tend to look to growth in output per head, rather than the number of heads, for explanations of economic growth.

When Piketty turns to productivity growth, he is also confident that it will be lower in the future than the past but, in historical terms, he is on still thinner ice. He never actually offers any explanation of "the spectacular increase in per capita output" (p. 93) in the nineteenth and twentieth centuries, so it is unclear what basis he has for concluding that the forces that drove economic growth in the past will no longer operate in the future. Strikingly, when Piketty alludes to the dynamics that foster economic growth—technology, innovation, knowledge diffusion—there is one word that he never uses: capital.

There have been serious debates in economic history about the importance of capital formation in the process of economic development, with the Industrial Revolution being an especially striking case in point. Yet Piketty omits any historical analysis of the productive role of capital—capital to buy machines or to hold inventories—capital, that is, in the most prosaic sense of the term. The omission puts him on an entirely different wavelength than historians who study the role of capital in the economies of the past, and surely explains why he relies so little on their work.

The modest attention that Piketty pays to the role that capital plays in the process of economic development stems from his definition of capital as "the sum total of nonhuman assets that can be owned and exchanged on some market" (p. 46). Thus, capital can include machines and inventories but it can also include residential property and financial assets. Indeed, Piketty's capital is so encompassing as to be amorphous, which explains why in part II, on the historical dynamics of capital, we experience a growing sense of abstraction.

As a historian of capital, Piketty is a "lumper" not a "splitter" with his sights set on measuring the historical relationship between aggregate capital and national income. Prior to World War I, what Piketty emphasizes is the overall stability of the capital-income ratio. Then history changes radically with the shocks of World War I and the Depression and we witness a collapse in the capital-income ratio in Europe—where "[b]y the mid-

dle of the twentieth century, capital had largely disappeared" (p. 118)—and in the U.S. Then, in the aftermath of World War II, we observe a resurgence of the capital-income ratio to levels that were close to those recorded in the late nineteenth and early twentieth centuries.

For explaining these "metamorphoses of capital," Piketty highlights the importance of both contingency and structure. It is contingency—the "shocks to capital" from war and depression—that accounts for the "dizzying fall" in the capital-income ratio in the interwar period in Europe. And it is structure, expressed in a simple accounting identity that links the capital-income ratio to growth and savings, $\beta = s/g$, that explains normalcy (p. 183). But Piketty provides little help in accounting for how shocks to capital feed into a decline in his capital-income ratios. His text is confined to general statements that apply to all of interwar Europe and do little to illuminate some of the startling declines his data suggest (p. 116). The reader is left to guess what is going on in the big swirling bucket of "other domestic capital" that lumps together blast furnaces, jewelry, bank accounts, and schools.

When Piketty moves from contingency to structure, from chaos to normalcy, it initially seems easier to follow changes in the capital-income ratio. He claims that "capital's comeback" since the 1970s can be explained by "slower growth coupled with continued high savings" consistent with the simple formula above. However, we soon realize that $\beta = s/g$ is not a straightforward accounting identity since Piketty's capital-income ratio is influenced by the valuations assigned to capital. And so, since the 1970s, the rising market valuations of corporate stocks and housing contribute to the rising capital-income ratios that Piketty's graphs show (pp. 187–191).

Piketty recognizes that estimating all forms of capital at market prices at a given point in time "introduces an element of arbitrariness (markets are often capricious)" but, he asks, "how else could one possibly add up hectares of farmland, square meters of real estate, and blast furnaces?" (p. 149). Yet, by lumping so much together, and measuring it at market value, he obscures as much as he reveals about the dynamics of capital. In particular, it is hard to know what variations in Piketty's capital-income ratio imply for the economy's capacity to produce goods and services. In principle, an increase in the capital-income ratio could be a positive sign, an indication that the economy is moving to a more productive phase, characterized by higher capital intensity. Piketty recognizes this possibility when he says that "capital is potentially useful to everyone, and provided that things are properly organized, everyone can benefit from it" (p. 167) but he provides no help in determining when "things" might be "properly organized." We are left with a substantial ambiguity: an increase in Piketty's capital-income ratio might result from more assets being put to work to produce greater output or from higher valuations being assigned to existing assets.

Unfortunately, which scenario we are in makes a major difference to how we perceive the rate of return paid

to capitalists. Is it the cost to society of moving to a higher level of economic development, as apologists of capital claim, or a measure of rentiers' gains on everyone else's backs, as critics of capitalism contend? Piketty cannot seem to make up his mind which scenario he believes more plausible—he pulls back from the brink of heterodoxy several times to emphasize the risk-bearing and entrepreneurial role of capital—but, in the end, it is the lack of clarity in his analysis, rather than his ideology, that weighs on his book on capital.

Talk of the rewards to capital brings me to the final step in Piketty's analysis, where he moves from capital to inequality. He does so based on an analysis of the rate of return on capital, r , which, when multiplied by the capital-income ratio, gives us α , the share of national income that goes to capital. Thus we have the final link in his logical chain— $\alpha = r \times \beta$ —which links growth to development to inequality. Consistent with his broad definition of capital, the rate of return thereon is equally encompassing (p. 54), and he estimates it over a long period of time based on French and British data.

On the face of it, the main conclusion he draws from this exercise is a striking one: the "pure return on capital" is extremely stable over time, oscillating "around a central value of 4–5 percent a year for more than two centuries" (p. 202). However, when one remembers that he is using market valuations of capital, the result is less surprising. If Jane Austen and Honoré de Balzac were right that the capital value of an asset bears some consistent relationship to the income it generates (p. 53), then the income that an asset generates should bear some consistent relationship to its capital value (Irving Fisher, *The Rate of Interest: Its Nature, Determination and Relation to Economic Phenomena* [1907], p. 13).

If, in Piketty's *Capital*, the value of capital and the return on capital are two sides of the same coin, the need for a theory of the rate of return on capital is not clear. Nevertheless, having characterized historical trends in the return on capital, Piketty seeks to explain them. It is at this late stage that the question of "What is capital used for?" becomes central, since Piketty considers it crucial for determining the rate of return on capital. Yet here he confronts the handicap of having written a book in which the main references to "factory" are to Père Goriot's pasta making, quite an accomplishment for a book that takes us from pre-industrial to post-industrial economies! Having said so little about the productive role of capital, Piketty flails about, now that he needs it, asking us to imagine all kinds of different societies, in the abstract, in which capital could or would be used in one way or another as a factor of production to earn a return (pp. 212–215). Yet, what about the returns in actual economies in which capital has been used, perhaps in the past?

Since Piketty's discussion of the determinants of the rate of return on capital is so inconclusive, we do not know if we should be concerned if returns to capital are falling or rising. As he shows, the significant diminution

of income inequality over the twentieth century largely reflects a decrease in top incomes from capital. He claims there was nothing natural about the decline; it was caused above all else by political change and, specifically, by “new public policies enacted in this period (from rent control to nationalizations and the inflation-induced euthanasia of the rentier class that lived on government debt)” (p. 275). So much for the causes of the decline in the return to capital, but when it comes to its economic implications Piketty’s analysis leaves us in the dark.

And what of the recent resurgence of income inequality? If this book has sold like hot cakes, it is because so many people, especially Americans, want to understand why inequality has increased lately. However, in a surprising and ironic denouement worthy of the great novels that Piketty is fond of citing, we learn that a rising share of income going to capital is not the primary explanation of growing income inequality in the late twentieth and early twenty-first centuries. Instead, he suggests we look to the massive growth in the inequality of labor income in Anglophone countries driven by an explosion of rewards to executives of their largest firms. Perhaps most surprisingly of all, Piketty portrays the rise of the “supermanager” as having little to do with the dynamics of capital. One wonders, however, about a theory of capital that cannot explain how senior corporate executives have used their control of America’s so-called capitalist corporations to systematically enrich themselves. Perhaps it is missing a fundamental law or two.

What then should we make of Piketty’s study? It is a stimulating book: Piketty deals with big questions, he

has thought deeply about them, and writes about them in an engaging way. He is articulate about the limitations of data and the way they are constructed. When it comes to historical phenomena, there is no question that what he says about inequality is of much interest to historians. If I have been critical of Piketty’s book, it is because I have read it as a book about capital, which is what the author intended it to be. And, from that perspective, the book seems to abstract from, rather than resolve, important questions for the history of capitalism.

Piketty believes that to address fundamental questions about capitalism, one needs to be a historian as well as an economist. What he does not acknowledge is that some of what he has learned as an economist is an obstacle to learning from history and nowhere is conventional economics weaker than when it comes to capital. Irving Fisher tried to cover up this weakness with fables of orchards and the fruits of a bounteous nature for explaining the productivity of capital. Still, he never overcame it and neither does Piketty. No matter how much data you marshal, they are only interesting if you make sense of them, and the lumbering, amorphous concept of capital that pervades Piketty’s book is just not up to the task. And so, notwithstanding this book, capital remains the blind spot of capitalism. So it will remain until economists prove willing not only to do the laborious work of creating vast historical datasets, but also to reconsider the suitability of their existing economic concepts and tools for learning about the past.

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