

Is the Past in Our Future?

By Paul Starr

Princeton University and Center for Advanced Study in the Behavioral Sciences,  
Stanford.

[starr@princeton.edu](mailto:starr@princeton.edu)

*Capital in the Twenty-First Century*, by Thomas Piketty. Translated by Arthur Goldhammer. Cambridge, MA: Belknap Press of Harvard University Press, 2014. 685 pp. \$39.95. ISBN 978-0-674-43000-6.

Every year a few books stir up serious public controversy, and a few have a deep impact on the social sciences. Thomas Piketty's *Capital in the Twenty-First Century* will be one of the rare books to do both, though not exactly for the same reasons. In the public arena, the book has set off debate about whether inequality is rising, but in the social sciences the recent direction of change is no longer in question. The public controversy has also concerned Piketty's stark forecast of a return to "patrimonial capitalism"—to a society where inherited wealth becomes increasingly dominant. Although Piketty shows that forecast to be plausible, his long-run contribution will not hinge on whether it turns out to be correct.

The book's durable value lies elsewhere. *Capital in the Twenty-First Century* brings together new data and theory into a powerful account of the historical development of capitalism and inequality over the past two centuries. It sheds new light on economic relationships, the historical trajectories of nations and regions, and the emergence of different structures of inequality. Moreover, in its sheer nerve and ambition, Piketty's *Capital* is likely to serve as a model for scholarship unrelated to its immediate subject.

In some respects, however, the book lends itself to misinterpretation. For example, Piketty often uses the term "total income" to refer to the sum of labor and capital income, as he does in a chart (p. 299) that shows the top decile's share of "total income" in the United States returning by the 2000s to the peaks of the 1920s. But "total income" here is market-generated income, as reported in tax returns, before taxes and transfers. "Total income" in the sense many readers may understand it—that is, post-tax-and-transfer income—is more equally distributed than it was before the New Deal. Piketty is perfectly aware of the difference, but the book tends to minimize the significance of the distributive changes brought about through Social Security and other systems of social provision. Piketty's great contribution is his analysis of wealth and top incomes, mostly based on tax data, but partly because of his analytical focus and methods, he does not pay equal attention to changes primarily affecting the middle and lower ranges of the distribution.

This is not a book that sprang full-grown from a French theorist's solitary reflection. It is the culmination of a 15-year, collaborative empirical project that has gathered new data on top incomes and the distribution of wealth in 20 countries over longer periods and with more uniform methods than any previous effort. Among Piketty's collaborators, Anthony Atkinson and Emmanuel Saez have made particularly important contributions to

this work, much of which has appeared in journal articles and two previous edited volumes. The original data are available online at the World Top Incomes Database (WTID). Those who have followed this enterprise will already be familiar with many of the findings, but even for them Piketty's book will be eye-opening as a comprehensive synthesis.

*Capital in the Twenty-First Century* has two separate explanations for rising economic inequality that may be a source of confusion, especially for American readers. The first and principal explanation, which grows out of the book's core theory, involves changes in income from capital; the second explanation involves changes in income from labor and applies to recent developments in the United States.

The principal argument of the book is about the long-term tendency of the rate of return on capital,  $r$ , to exceed the rate of economic growth,  $g$ , summarized in the now-famous inequality  $r > g$ . Piketty calls this pattern "the central contradiction of capitalism," though it is not clear in what sense it is a contradiction since Piketty, unlike Marx, is not predicting capitalism will collapse as a result. Piketty, however, does see the excess of  $r$  over  $g$  as tending to increase capital's share of national income. And he demonstrates that after the "shocks" from war, inflation, and depression during the first half of the twentieth century, capital has returned to the historical levels that it had in relation to national income in Europe before World War I.

But this is not Piketty's explanation for rising income inequality in the United States since the 1980s. That development, he argues, mainly involves increased inequality in income from labor, chiefly due to sharp increases in salaries of CEOs and other "supermanagers." While "capital's comeback" results from fundamental systemic tendencies evident for centuries, the spectacular jump in top incomes in the United States (and to a lesser extent in the other English-speaking countries) is a new phenomenon, which Piketty attributes to politics, public policy (especially regarding taxes), and social norms. With different policies and norms, the continental European countries have not witnessed a comparable spiral of top corporate salaries.

Whether these two sources of rising inequality will remain separate is an open question. Corporations in the rest of the world may follow American compensation practices, and America's supermanagers and entrepreneurs (and their children) will become tomorrow's rentiers. In a "worst of both worlds" scenario, economic inequalities could increase still further from the combination of a growing capital share and the capture of more labor income by top executives.

Analytically, however, it is best to keep the two arguments separate: on the one hand, Piketty's general analysis of capitalism and, on the other, his comparative historical analysis of national and regional economies, of which his account of recent differences between the United States and Europe is only one part. If Piketty had stayed at a purely abstract level, the book would not have had the depth, richness, or relevance to contemporary politics that his comparative analysis gives it. But if he had provided only a

comparative economic history without the theoretical framework, the book would not have had its power and reach.

The two halves of Piketty's account bear somewhat different relationships to the two leading approaches to explaining inequality: (1) the mainstream, neoclassical explanations emphasizing marginal productivity; and (2) what may be broadly grouped together as more political and sociological explanations emphasizing institutions and power. The neoclassical arguments suggest that inequality is rational and conducive to growth and that little can be done about it except to improve education and training, while the more political and sociological accounts typically claim that inequality reflects unequal power in shaping institutions and policies and that more egalitarian alternatives are feasible without impairing growth.

In regard to the recent take-off of top incomes in the United States, Piketty unequivocally and convincingly rejects neoclassical explanations. Growing inequality, he argues, cannot be explained by differences in marginal productivity (due, for example, to the failure of education to keep up with skill-biased technological change); rather, the driving forces have been political and social.

In developing his first argument about capital, however, Piketty may seem more ambiguous because he employs neoclassical logic even as he reaches conclusions about tendencies toward concentrated wealth and the absence of equilibrating forces that break with the mainstream tradition. But, if read carefully, Piketty is clear that capitalism cannot be understood without reference to institutional structures that are inherently political (see, for example, his discussion of the "stakeholder" model of German corporations and its effect on stock-market valuations [pp. 140-46]). Part of the book's originality and persuasiveness lies in the deft way in which it turns neoclassical logic on its head with the use of historical evidence.

Piketty's general analysis of capitalism emerges from a combination of theoretical propositions and empirical findings. After decomposing national income into capital and labor income, he focuses on what determines capital's share of the total. Piketty designates capital's share as  $\alpha$ , and the ratio of the total capital stock to national income as  $\beta$ . The core of the theory consists of two equations that he labels, rather extravagantly, "laws of capitalism." The first is just an accounting identity,  $\alpha = r \times \beta$ , which merely says that capital's share of national income is the product of the rate of return and the capital/income ratio. The point of this tautology is to make clear that capital's share depends on what happens to the rate of return as the capital stock varies in relation to national income. "Too much capital" should kill the return, assuming that capital's marginal productivity drops as the capital stock increases. The key question is then how much  $r$  drops (or rises) as the capital/income ratio  $\beta$  increases (or falls). If  $r$  drops proportionately less than  $\beta$  rises, capital's share will increase, but if  $r$  drops more, capital's share will fall. This, in turn, depends on the demand for capital, which may be affected by technological change that allows for substitution of capital for labor. For example, if the capital/income ratio rises but lucrative new uses for capital are

available—say, in making machinery to substitute for workers—the return on capital can stay high.

For France—which he claims is representative of Europe—Piketty calculates that the rate of return  $r$  has fluctuated around a central value of 4-5 percent from the eighteenth to the twenty-first century (though he suggests that it may be declining to 3-4 percent). As a result of the “virtual stability” of  $r$ , capital’s share has depended primarily on the capital/income ratio, which has followed a U-shaped curve. Before World War I, the ratio stood at about 600-700 percent; that is, capital equaled six or seven times annual national income. With the devastating shocks of 1914-1945, capital stocks fell to two to three times national income but then rebounded and are now back up at approximately pre-World War I levels.

Leaving aside “shocks” for the moment, what determines the capital/income ratio over the long run? Piketty’s “second fundamental law of capitalism” describes an asymptotic relationship in which the capital/income ratio approaches the ratio of the savings rate to the growth rate:  $\beta = s/g$ . Or to put it differently, the higher the savings rate and the lower the growth rate, the higher the capital/income ratio.

These relationships help explain why the capital/income ratio in the advanced economies has risen (and may rise further). The rate of economic growth is the sum of the rate of population growth and the growth rate in per capita output. Both components have slowed—population growth with the demographic transition; and growth in per capita output with the end of the three “catch-up” decades after World War II. With growth rates falling below savings rates, the capital/income ratio rises, and as long as  $r$  falls proportionately less than  $\beta$  rises, capital’s share of national income increases. And since capital income is distributed more unequally than labor income, an increase in capital’s share leads almost inevitably to an increase in inequality.

But this is not to say that capital in France or elsewhere in Europe is distributed as unequally as it was before World War I. Piketty uses the terms “capital” and “wealth” interchangeably. Capital, as he defines it, consists of assets that can be owned and exchanged on a market, including not only financial assets such as stocks and bonds, physical assets such as machinery, and intangible assets such as patents, but also real estate, including owner-occupied housing. (Piketty refuses, however, to include “human capital” on the grounds that education and skill cannot be owned and traded and are therefore fundamentally different from capital in the sense that he is using the term.) While the capital/income ratio has returned to earlier levels, the composition of capital has substantially changed. During the twentieth century, residential housing increased as a proportion of national capital, and a “patrimonial (or propertied) middle class” emerged. Summing up the changes in capital ownership, he writes, “The poorest half of the population still owns nothing, but there is now a patrimonial middle class that owns between a quarter and a third of total wealth, and the wealthiest 10 percent now own only two-thirds of what there is to own rather than nine-tenths.” (p. 377)

Piketty suggests another way, however, in which capital income is becoming more concentrated than capital itself: Those with greater financial wealth are able on average to obtain a higher return on their assets. In addition, capital income is underreported because of exemptions and tax evasion. If wealth kept in off-shore tax havens could be properly attributed to its owners, capital and capital income would be even more concentrated at the top than tax records show.

The other half of the story, the growth of labor-income inequality, emerges from Piketty's comparative historical analysis. Although he discusses Great Britain and Germany (and occasionally alludes to Japan and other countries), Piketty focuses primarily on France and the United States in developing the argument. Economic inequality is now greater in American society, but in the nineteenth century the United States—except for the South—was more egalitarian than Europe. Capital/income ratios were substantially lower thanks to the low cost of land and high rates of population growth. Even with industrialization, the United States still had a more equal distribution of wealth and income at the turn of the twentieth century, though inequalities rose to a peak in the 1920s.

In Piketty's comparative account, the critical turns in distributive patterns came at two different points in the twentieth century. Between 1914 and 1945, the shocks of war and depression reduced inequality in both Europe and the United States, but in entirely different ways. In France, inherited wealth suffered devastating losses from the “destruction caused by two world wars, bankruptcies caused by the Great Depression, and above all 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) While wage inequality in France was stable over the long run, total (market) income became more equally distributed “due entirely to diminished top incomes from capital” (pp. 272-73). In contrast, capital losses were not as great in the United States as Europe 1914 and 1945; instead, differences in labor incomes narrowed primarily as a result of public policy. Beginning in the New Deal and continuing into the 1950s, the United States enacted higher income and estate taxes than did European countries did.

The second turning point came in the 1980s: After having been a pioneer in redistributive taxation, Piketty writes, the United States in the Reagan years became a pioneer in the opposite direction, sharply cutting taxes and unleashing an unprecedented increase in top incomes. On the basis of comparative evidence, Piketty sees tax policy as crucial; in his account, reduced rates in the 1980s gave CEOs and other top corporate managers an incentive to seek huge pay increases, and their handpicked boards did not stand in their way.

In short, Piketty argues that capitalism can produce extreme inequality in two ways: through high concentrations of capital as in “old” Europe and the American South before the Civil War and through high concentrations of labor income as in the United States today. The first he calls “hyperpatrimonialism,” the second “hypermeritocracy” (pp. 264-5) even though he says merit has less to do with it than what he calls “meritocratic

extremism.” In some respects, as he acknowledges, this binary story is overdrawn. In the United States, capital income accounts for one-third of the increase in income inequality. Tax calculations influence whether executives are paid in salary or stock options. In the finance industry, much of the revenue supporting the “labor income” of top executives comes from the capital income of the firm.

Curiously, Piketty downplays the impact of the growth of the financial industry on inequality, arguing that although financial executives are overrepresented at the top, 80 percent of the top income groups are not in finance. But finance dominates the highest pay levels. In every year since 2004, the 25 top-earning hedge fund managers have together received more income than all of the chief executive officers of the Standard and Poor’s 500 companies combined; the average pay (in 2010 dollars) for those 25 top hedge fund managers climbed from \$134 million in 2002 to \$537 million in 2012. (Kaplan and Rauh, 2013) Financial deregulation deserves more attention as a causal factor than Piketty gives it.

Another problem, as I mentioned earlier, is that Piketty analyzes historical changes in “total income” by using market income before taxes and transfers, a definition that is misleading over periods when public policy radically altered the post-tax-and-transfer distribution. Piketty’s U-shaped curve for top (market) incomes in the United States between the 1920s and early 2000s does not, in fact, mean income inequality has returned to the status quo ante. Moreover, market income cannot be considered independently of taxes and transfers. Consider what would happen to market income if Social Security were eliminated overnight. More seniors would go to work and earn wages, and by the definition Piketty uses, inequalities in total income would decline. But the elimination of Social Security would dramatically increase inequality in total disposable income.

In addition, because of his reliance on tax data (which also don’t include tax-free fringe benefits such as employer contributions to health insurance) and failure to adjust for changes in household size, Piketty’s numbers give a more negative picture than do other analyses of changes in middle-class incomes during the past 40 years (see, e.g., Congressional Budget Office, 2011). Such analyses also show rising inequality, but not absolute stagnation in the middle.

These reservations do not invalidate the main thrust of Piketty’s argument about rising inequality since the 1980s, nor do they invalidate (though they do qualify) his claim that inherited wealth accounts for a growing share of total wealth. Here we return to the book’s principal argument about the rate of return exceeding the rate of economic growth. According to Piketty, the advanced societies cannot realistically expect to grow much faster than they have been since 1980; no country “at the world technological frontier” has ever had a long-term growth rate in per capita output exceeding 1.5 percent (p. 93). Assuming a future per capita growth rate of 1.2 percent, Piketty puts aside both the more dire forecasts as well as the optimistic scenarios based in part on the idea that the official data do not capture all the growth from the information economy (see Starr 2014). In Piketty’s analysis, “the return to a historic regime of low growth, and in particular zero or even negative demographic growth, leads logically to the return of

capital.” (p. 233) Slow growth implies that capital accumulated in the past gains in importance.

Once again using data for France, Piketty produces another set of U-shaped curves from the nineteenth to the twenty-first centuries. Those who own capital have either inherited it or accumulated it through savings. In the nineteenth century, Piketty estimates, the annual flow of inheritances was equal to 20-25 percent of national income, and inherited wealth accounted for between 80 and 90 percent of private capital. But after the shocks of 1914-1945, inheritance flows dwindled to only a tiny proportion of national income, and by the 1970s inherited wealth was down to about 40 percent of private capital. Since then, however, inheritance flows have grown and inherited wealth has again come to dominate accumulated savings. Looking ahead under two different scenarios, Piketty projects inheritances to account for 80-90 percent of private wealth by the mid-twenty-first century. This is the basis for his forecast of a return to patrimonial capitalism.

But, as with the other U-shaped curves, things would look different if Piketty took taxes and transfers directly into account. Benefits available during disability or retirement have an equivalent wealth value. Including the capitalized value of social insurance programs would significantly raise the share of total assets of the least wealthy. To be sure, “Social Security wealth” is not wealth that can be passed on to heirs or accumulate over generations, but it serves some of the same functions as wealth during a lifetime.

Whether Piketty’s forecast of a return to patrimonial capitalism proves accurate depends on a variety of unknowns. The rate of return may fall more rapidly in the future than in previous periods of rising capital/income ratios; as the investment ads warn, “Past performance is no guarantee of future returns.” The combined effect of taxes, consumption by the wealthy, and inflation may cut into or eliminate the savings from capital income and prevent wealth from compounding. In his projections, Piketty assumes no “shocks” to capital, but this century will likely have its own shocks, and some of those may result from the very processes that Piketty lays out. In a world with extreme inequalities and falling returns on investment, both politics and business may become more desperate and prone to crisis.

Regardless of whether inherited wealth returns to nineteenth-century proportions, there are important lessons here for social theory and politics. Piketty’s historical data help to explain why sociologists in the post-World War II era believed that inherited wealth ceased to be important in modern societies. They overgeneralized from a temporary circumstance. In fact, much of twentieth-century sociology was formulated at precisely the moment when Piketty’s U-shaped curves were at their bottom. Theorists looked back and saw downward slopes for inequality and inherited wealth and misinterpreted them as inevitable features of modernization.

Piketty’s work also provides a useful corrective to the recent inequality literature, which has focused mainly on the determinants of labor income rather than income from capital. In stratification, political sociology, and other fields, sociologists have been more interested in the extended meanings of capital—social capital, cultural capital—than in

the old-fashioned sort. We have been bewitched by our analogies and neglected the rebounding importance of capital in its original sense.

Sociologists should be both humbled and heartened by Piketty's *Capital*—humbled because the discipline has not recently produced a work of comparable ambition, quality, and scope, and heartened because of Piketty's conception of social science and the example he sets of both analytical depth and intellectual courage. Among other things, the book is a rebuke to his home discipline of economics and an invitation and challenge to social scientists in other fields. Economics, he writes, "has yet to get over its childish passion for mathematics and for purely theoretical and often highly ideological speculation, at the expense of historical research and collaboration with the other social sciences." (p. 32) In the conclusion, he urges the other disciplines "not [to] leave the study of economic facts to economists." (p. 575)

*Capital in the Twenty-First Century* is a validation of the enterprise of social science conceived of expansively and put to serious purposes. After a long era of uneasiness about "grand narratives," Piketty has produced a new narrative of the origins of our times that we will have to reckon with alongside the classics. When all the criticism has been tallied, the book will remain an affirmation that social inquiry, despite its inevitably political character, is capable of uncovering lawful patterns in human history.

#### References

Congressional Budget Office. 2011. *Trends in the Distribution of Household Income between 1979 and 2007*, at <http://www.cbo.gov/sites/default/files/cbofiles/attachments/10-25-HouseholdIncome.pdf>

Kaplan, Steven N., and Rauh, Joshua. 2013 "It's the Market: The Broad-Based Rise in the Return to Top Talent," *Journal of Economic Perspectives* 27: 35–56

Starr, Paul. 2014. "The Growth Paradox: If Our Technology Is So Smart, Why Aren't We All Getting Richer?" *The New Republic* (July 14), 37-41.