Making the Most of *Capital in the Twenty-First Century**

Peter H. Lindert

> All things considered, I believe that the manufacturing aristocracy that we see rising before our eyes is one of the harshest that has ever existed on earth. But it is also one of the most limited and least dangerous.
> Nevertheless, friends of democracy must keep an anxious eye peeled in this direction at all times. For if permanent inequality of conditions and aristocracy are ever to appear in the world anew, it is safe to predict that this is the gate by which they will enter.[1]

Alexis de Tocqueville's famous warning proved even more broadly correct than he predicted. It was not just a new manufacturing elite that arose in nineteenth-century America and Europe, but a property-owning elite spanning all sectors of the economy. Thomas Piketty's new book makes the same kind of broad prediction about the twenty-first century that de Tocqueville could have made about the nineteenth. And Piketty's prediction could prove correct, just like de Tocqueville's.

Capital in the Twenty-First Century has lit up the sky across Britain and North America. Starting from the solid empirics of the multi-authored World Top Incomes Project led by Anthony Atkinson, Piketty, and Emmanuel Saez, the volume adds many data extensions, a simple theoretical framework, bold predictions, and controversial policy prescriptions. In the process, the book has transported us to a higher understanding of historical movements in inequality. This essay will signpost the paths that scholars can most usefully follow from the point at which *Capital in the Twenty-First Century*'s conclusions leave us.

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1. Alexis de Tocqueville, *Democracy in America* [1839], trans. Arthur Goldhammer (New York: The Library of America, 2004), 652.

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Which Leads Should We Follow?

This essay's reactions and recommendations can best be introduced with a multiple-choice exam question:

Which of the following historical trends is of great concern to Thomas Piketty?

A. *The inequality of disposable income*
B. *The inequality of original income*
C. *Tax progressivity*
D. *The importance of unequal inheritance*
E. *The inequality of nonhuman wealth*
F. *The ratio of wealth to income*
G. *The ratio of productive nonhuman capital to income*
H. *The rate of return on nonhuman wealth*
I. *The rate of return on productive nonhuman capital*
J. *The share of property income in national income*
K. *All of the above*

The answer is of course K, and even 685 pages cannot contain all of Piketty's ideas and evidence on these issues. The documentation spills over to some large internet sites offering downloadable data sets and explanations of their calculation procedures.[2]

My main reason for posing this multiple-choice question is to argue that trends A through J, all of them of great interest to Piketty, can be ranked according to their usefulness as paths for scholars and policymakers to follow. The first four are of top social priority, and with them Piketty and his collaborators have given economic historians a whole new research agenda. Yes, we should care a great deal about income inequality trends (A and B), and unless they are checked by tax progressivity (C), future generations may be confronted with the corrosive social effects of unequal patrimony (D). Even if today's top income rewards were based on productive innovation, which is only partly the case, their beneficiaries could still hand political and social power to less productive heirs. Piketty conjures up the horror of a society dominated by the political, economic, and social power of unproductive heirs.

2. In addition to the book's own online archive, see the home pages of Emmanuel Saez, Gabriel Zucman, the "World Top Incomes Database," and the "Chartbook of Economic Inequality" compiled by Anthony Atkinson and Salvatore Morelli. For a convenient survey of income and wealth inequality in OECD countries since 1870, see Jesper Roine and Daniel Waldenström, "Long-Run Trends in the Distribution of Income and Wealth," in Anthony B. Atkinson and François Bourguignon, eds., *Handbook of Income Distribution* (Amsterdam: North Holland, 2015) 2:469–592. For earlier and less developed contexts, see Branko Milanović, Peter H. Lindert, and Jeffrey G. Williamson, "Pre-Industrial Inequality," *Economic Journal* 121 (2011): 255–72, and the corresponding "social tables" on the site "Global Price and Income History Group" (http://gpih.ucdavis.edu), under the rubric "Early Income Distributions."

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Paying more attention to these "final four" core inequality concerns, A–D, promises greater insights than some of the other paths that Piketty has pointed out. This essay proceeds up the list from bottom to top, from J to A. In other words, it starts with one path that future scholarship should avoid, and finishes with the most promising paths, those on which Piketty and his collaborators have advanced our knowledge the most. The final section identifies some important opportunities for scholars to enhance Piketty's core message, drawing on a different literature on the economic effects of political inequality.

The Percentage Shares of Labor versus Capital in Current Income

The percentage shares of labor versus capital in current national income (J) have never proved to be good predictors of inequality, and continue to be poorly correlated with it over time and space. They are antiquated, dating back to nineteenth-century classical economics. What is more, their alleged link to inequality has never made sense. Having 60 percent of national income go to labor could reflect perfect equality, with 60 percent of the population equally sharing labor incomes and the other 40 percent equally sharing property incomes. Or it could mean horrific inequality if the 60 percent going to labor were shared by everybody but one propertied ruling family. Furthermore, in recent economic history the share going to property has had no reliable correlation with inequality, either within the top ranks or for the entire economy.[3]

The Rate of Return

The idea featured most prominently by Piketty himself, and by the media coverage of his book, is the rate of return (r), defined as the ratio of property income to the accumulated stock of wealth. Inequality becomes severe over any epoch in which $r > g$, that is, when this rate of return exceeds the growth rate of the whole economy's gross domestic product, or GDP (g). The idea sounds plausible as a prediction, and indeed Piketty offers a rough confirmation from history: since 1800, the only period in which income inequality has fallen is that between 1913 and 1950, when the chaos of wars and depression caused the rate of return to plunge below the growth rate of the economy, even though the growth rate itself was depressed. This featured historical correlation, which Piketty wishes to apply to any advanced country, deserves further investigation.

This predictive tool is missing two elements, however. First, we cannot make much use of it until we have a reliable way of predicting the rate of return and the rate of GDP growth. Piketty has not supplied a systematic explanation of the rate of return, though he rightly notes that it is driven by hard-to-predict shocks, such as world wars, global depression, and plutocratic capture of the political process.

3. For the lack of a clear correlation to the capital share within the top ranks, see Roine and Waldenström, "Long-Run Trends", esp. fig. 5.

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Nor has he added to our understanding of the factors determining economic growth, aside from his welcome evidence that growth is not negatively affected by high tax rates. Second, readers of the *Annales* might rightly wonder where he got his now-famous $r > g$ formula. In fact, it originates in a shaky, and not particularly relevant, neoclassical growth theory of the sort that Piketty derides early in his book.[4] The theory is shaky because it assumes a world of only one commodity and requires a long ahistorical trajectory toward an eventual equilibrium, with no further shocks to the world economy. It is not particularly relevant to the rest of the book because it defines "capital" as the productive physical asset (think of steel mills) rather than the private wealth (like money) that Piketty really needs to focus on if he is to tell the story of unequal wealth.

Wealth/Income Ratios

As for the ratios of either wealth or productive nonhuman capital to national product (F and G), these were moderately good predictors of top-income shares before World War I. Piketty's book devotes relatively little space to the prewar era, aside from summarizing his own path-breaking coverage of the French case in collaboration with Gilles Postel-Vinay and Jean-Laurent Rosenthal.[5] Better measurements of pre-1914 wealth may actually strengthen his assertion that the ratio of nonhuman wealth to income was correlated with income inequality.

Such measurements are now available for America between 1774 and 1870, and they do indeed improve the correlation. For Piketty, there is "no doubt that the capital [i.e., private net worth]/income ratio was much lower in the New World colonies" than in Europe.[6] In reality, however, it was even lower than the sources used by Piketty and Zucman tend to imply. The only error in the exemplary work of Alice Hanson Jones, on which Piketty and Zucman have drawn, was her conjecture about income.[7] Jones applied a capital/output ratio of 3–3.5, borrowed

4. For example, he dismisses Daron Acemoglu and James A. Robinson's emphasis on the opposition between "extraction" institutions (in the service of a minority with the aim of exploiting the rest of the population) and "inclusive" institutions (which enable the majority to participate in political governance, thereby limiting, or even eliminating, the process of exploitation): Acemoglu and Robinson, *Why Nations Fail: The Origins of Power, Prosperity, and Poverty* (New York: Crown Business, 2012). Piketty also rejects explanations that use superstar status or "winner-take-all" principles to account for very high incomes, the human capital approach to labor earnings, and even the theory on the race between education and technology set out in Claudia Goldin and Lawrence Katz, *The Race between Education and Technology* (Cambridge: Harvard University Press, 2008).

5. Thomas Piketty, Gilles Postel-Vinay, and Jean-Laurent Rosenthal, "Wealth Concentration in a Developing Economy: Paris and France, 1807–1994," *American Economic Review* 96, no. 1 (2006): 236–56.

6. Thomas Piketty, *Capital in the Twenty-First Century*, trans. Arthur Goldhammer (Cambridge: Harvard University Press, 2014), 150.

7. Alice Hanson Jones, *American Colonial Wealth: Documents and Methods* (New York: Arno Press, 1977); Jones, *Wealth of a Nation to Be: The American Colonies on the Eve of Revolution* (New York: Columbia University Press, 1980).

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from the United States of the 1970s, to the wealth of the 1770s. In our current work, Jeffrey Williamson and I now place this ratio much lower, at 1.89. Similarly, we find that American wealth/income ratios stayed below, but converged upward toward, the Piketty-Zucman estimates between 1774 and 1860. Since we also find slightly steeper increases in the inequality of income and wealth between 1774 and 1860 than did Piketty and Zucman, the net result of our revisions is to improve the Piketty-predicted correlation between the wealth/income ratio and income inequality for this period.[8]

Oddly, however, for the twentieth-century trends that Piketty and his collaborators have documented so well, the relevance of the wealth/income and capital/income ratios for the distribution of income is less compelling. Across the different countries studied, the levels and movements of these ratios do not correlate well with those in income inequality. Over time, more correlation can be seen within Britain, or France, or Germany, or the United States. Yet, as we shall see below, the same overall movements become apparent when we look at the evolutions of inequality in incomes that have little to do with wealth, and are reflected in wage rates or in the ratio between middle and lower incomes.

Wealth Inequality

Data on households' wealth inequality (E) are particularly helpful indicators of income inequality before the twentieth century, when direct measures of income were sparse. Yet for the twentieth and twenty-first centuries, wealth inequality does not quite make it into the "final four." For these more recent times, the data on wealth are weaker than those we have for income inequality, as Piketty has acknowledged in a response posted on his blog.

More fundamentally, the inequality of nonhuman wealth is inherently less interesting than the inequality of total income or total wealth (including human). The material inequality we really care about is that of a person's lifetime resources, as shared within a household. This can be measured either as an inflow, by one's lifetime human earnings plus inheritance, or as an outflow, by one's lifetime consumption plus bequest. For most people, any calculation of their lifetime resources (all capitalized or all annuitized) shows the quantitative dominance of human earnings or of consumption flows, not of nonhuman wealth.

Income Inequality, Fiscal Progressivity, and Inheritance

At the top of the multiple-choice list come the paths that scholars and the wider public should follow most closely, exploring the trends A through D. The Atkinson-Piketty-Saez team has delivered a history of the shares of national income captured

8. Peter H. Lindert and Jeffrey G. Williamson, "American Incomes before and after the Revolution," *Journal of Economic History* 73, no. 3 (2013): 725–65, here p. 747; and our *American Growth and Inequality since 1700* (Princeton: Princeton University Press, 2016), chapters 2–5.

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by the top income ranks in dozens of countries over the last hundred years. In other words, they have solved the "top coding" problems that have hidden top incomes from our view for so long. This empirical triumph allows them to establish two great twentieth-century movements in the share of income captured by the top-income elite. First, in every developed country of the Organization for Economic Cooperation and Development (OECD), the income share of the top 1 percent of households dropped between about 1913 and about 1973 (and the same holds true whether one considers the top 0.1 percent or 10 percent of richest households). Second, in several developed countries, most of them English-speaking, the same top income shares have marched upward since the 1970s. Yet they have hardly risen at all in a dozen other developed countries, notably in continental Europe and Japan.[9] This second finding effectively renders the Kuznets Curve obsolete: it is no longer possible to say that economic development from middle-income levels leads to more equal incomes on a permanent basis.

The finding that income gaps between the rich and the rest are widening in so many countries evokes the usual split of ideological reactions. Critics will of course challenge Piketty's assumption that inequality is bad, and will revive the old argument that redistributing to the richest somehow creates jobs and growth. This is where Piketty scores another empirical triumph with a simple stroke. His figures 14.1 and 14.2 on the history of top tax rates[10] deliver a truth that is inconvenient for proponents of the trickle-down view: the three decades in which the leading countries experienced their best growth performance of all time occurred when they kept the highest tax rates on top incomes and inheritances. They were followed by lower top tax rates and lower growth. Of course, correlation is not causation. Yet this simple display of history calls the bluff of anyone who extravagantly claims that "history shows" high taxes on top incomes and inheritances are bad for growth.

Look at All Incomes, All Ranks

A key next step toward better inequality predictions is to transcend *Capital in the Twenty-First Century*'s emphasis on wealth and top income shares, and to pursue past and future movements in *overall* inequality across all types of income and all income ranks. Those who share Piketty's interest in nonhuman wealth must join forces with scholars mapping the history of the inequality of human labor earnings. Thus far, Piketty has merely dipped his toes into these waters. His de-emphasis on human labor earnings seems to reveal an aversion to literature on human capital, to studies based on the superstar "winner-take-all" theory, and to the larger labor-economics literature emphasizing shifts in the supply and demand for skills.

9. The share of income received by the top 1 percent has risen since the 1970s in Australia, New Zealand, Great Britain, Ireland, Canada, and the United States among long-term OECD countries, and also in Argentina, China, Singapore, and South Africa. In Portugal and Sweden it has begun to rise slightly since about 1980.

10. Piketty, *Capital*, 499 and 503.

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Perhaps Piketty shunned these simply for revisionist impact, or perhaps because others have sometimes used human capital arguments to support the smug view that "people tend to get what they are worth."

Yet the empirical literature on earnings inequality—produced by the team led by Atkinson and the field of labor economics in general—is so substantial and well founded that it needs to be enlisted as an ally in the struggle to explain inequality movements, especially for the twentieth and twenty-first centuries.[11] The clearest way to underline the urgency of shifting our attention from capital to capital-plus-labor, and from top income shares to all income gaps, is to note what has been happening to income gaps and wage-salary gaps within the non-elite income ranks since the mid-twentieth century. Incomes within this majority of the population are relatively free from the under-reporting that is so severe within the top 5 percent of the household income ranks. Yet these same non-elite incomes receive far less attention in Piketty's book.

Suppose that Piketty and his collaborators had never been able to solve the problem of measuring top incomes. Suppose that our information about income inequality were restricted to the incomes of the bottom 90 percent of the income ranks, and we knew nothing about the top 10 percent except that they had some unknown income advantage over the rest of us. What kind of inequality movements would we have seen since the mid-twentieth century? I will first illustrate this with some evidence from the United States and the United Kingdom, and then summarize the multi-country patterns of inequality among the non-elite.

The history of American inequality since the early twentieth century yields the movements shown in figure 1. Even within the lower 95 percent of the household income ranks, the movements in the gap between middle and bottom income classes show a striking fall and rise, as do the top income and top wage shares. This is what the crude measures of the ratio of middle incomes to lower incomes tell us, again confined to the lower 95 percent of the population to avoid the understatement of top incomes (which tends to mean the top 5 percent in postwar US data). Indeed, the middle-versus-lower income ratios deliver an even more ominous result than the American top income shares made famous by Piketty and Saez. The gap between middle and lower incomes has widened well beyond the level recorded in 1929, whereas the income gaps revealed in such Piketty-Saez series as the top 1 percent share have just barely recovered their 1929 levels. The same tale is told by the simple wage-rate ratios from labor market surveys. As figure 1 also shows, the pay gap between a person earning the 90th salary percentile and the median salary-earner has continued to widen since the 1950s. This story of

11. For a vast history of earnings inequality in twenty OECD countries since the mid-twentieth century, see Anthony B. Atkinson, *The Changing Distribution of Earnings in OECD Countries* (Oxford/New York: Oxford University Press, 2008), and Anthony B. Atkinson and Salvatore Morelli, "Chartbook of Economic Inequality," www.chartbookofeconomicinequality.com. For a convenient review of the earnings-inequality literature in labor economics using postwar American data, see David H. Autor, "Skills, Education, and the Rise of Earnings Inequality among the 'Other 99 Percent,'" *Science* 344, no. 6186 (2014): 843–50.

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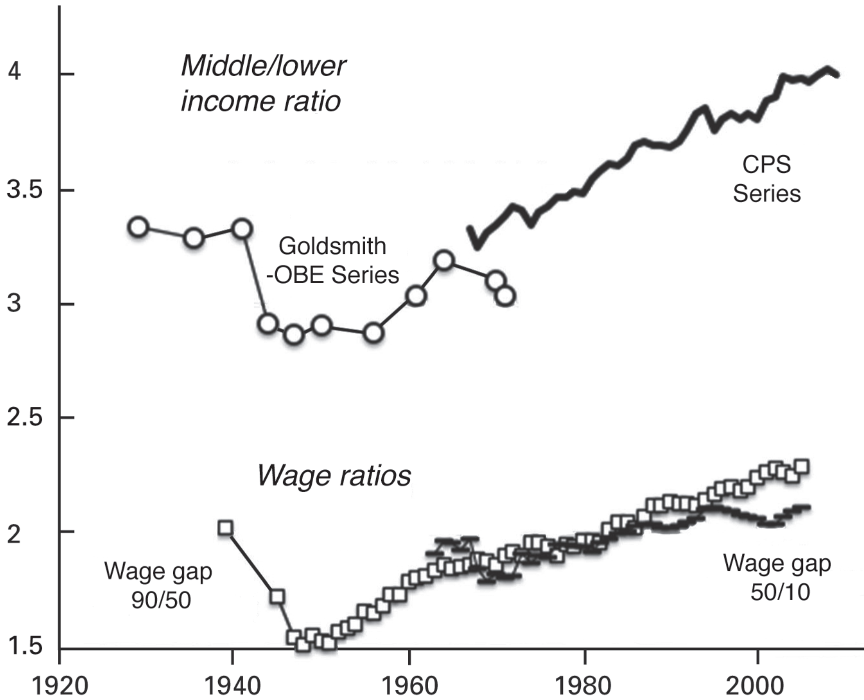
Figure 1 – Inequality within the bottom 95 percent, United States, 1929–2009



The "middle/lower income ratio" measures the ratio of the average income of percentiles 41–95 divided by the average income of percentiles 0–40 in the household income ranks. The "Goldsmith-OBE series" corresponds to the shares of pre-tax income received by households, as estimated by Selma F. Goldsmith, "Changes in the Size Distribution of Income," in Inequality and Poverty, *ed. Edward C. Budd (New York: Harper and Row, 1967) for 1929–1961 and then by the US Office of Business Economics, Survey of Current Business, for 1961 through 1971. The "CPS series" is based on the US Census Bureau's Current Population Survey (CPS) and the Money Incomes of Households. The money income series includes receipts of cash transfer payments, but not of payments in kind. See http://www.census.gov/compendia/statab/cats/income_expenditures_poverty_wealth/household_income.html, accessed 31 October 2013. The "wage gap 90/50" is based on Atkinson,* Changing Distribution of Earnings, *pp. 411–24, series for the 90th percentile wage relative to the median. This starts with the Labor Market Survey wage of the 90th percentile for 1973–2000. To this it splices an Economic Policy Institute wage series for 2000–2006, a CPS male wage series for 1967–1973, and a CPS series for workers of both sexes for 1939–1967. The "wage gap 50/10" is based on the same sources and procedures as the "wage gap 90/50," except that it takes the ratio of the median wage to the wage of 10th percentile.*

wider income gaps in the middle and lower ranks is at least as dramatic as the now-famous rise of the share received by the top 1 percent.

Something similar happened to British incomes below the top 10 percent of the social ranks. Figure 2 suggests that middle incomes, here shown as crude ratios of the 40th–90th percentile "middle" incomes to the average incomes in the bottom 40 percent, rose from the 1940s to the 1980s. Other measures suggest that such ratios continued to rise at least until the end of the twentieth century, though the British data series have changed their definition of income a number of times.

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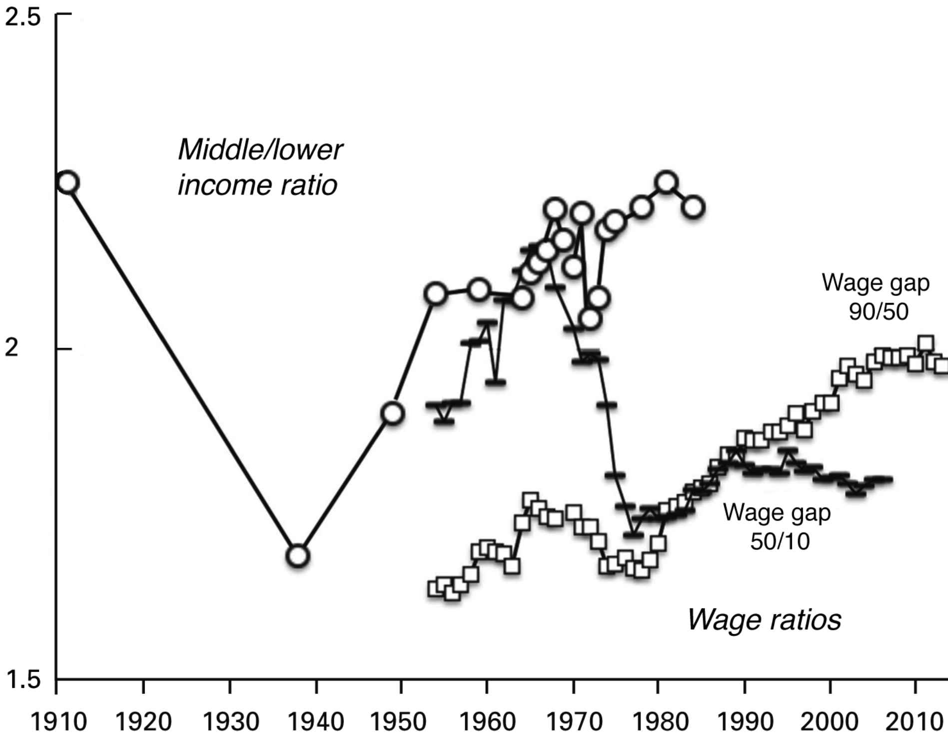
Figure 2 – Inequality within the bottom 90 percent, United Kingdom, 1911–2013



For the wage gaps, the data are drawn from the Family Expenditure Survey for all workers, conducted annually over the period 1968–2003 (Atkinson, Changing Distribution of Earnings, *table S.4, pp. 384–85), the data on income tax (Schedule E) between 1954–1979 (ibid., table S.7, p 390), and the data of the Annual Survey of Hours and Earnings from 2003–2006 (ibid., table S.5, p. 388).*
The middle/lower income ratio measures the ratio of pre-tax personal income for the average income of percentiles 41–90 and the average income for percentiles 0–40. It uses the Bowley-Stamp-Routh distribution of individual taxpayers' incomes for 1911, followed by the before-tax Survey of Personal Incomes data from the Royal Commission on the Distribution of Income and Wealth, Third Report on the Standing Reference *(London: HMSO, 1977), 240.*

As in the United States, the salary gap between a person earning the 90th salary percentile and the median salary earner has widened since the 1950s, or at least since the late 1970s.[12] Thus for Britain, as for America, the upward march of inequality since the 1950s or 1970s seems to have been dramatic over the entire income spectrum, and not just in the gaps between the very top and the rest of society.

Which other advanced OECD countries shared such experiences with America and Britain, and which did not? The set of countries for which earnings gaps have

12. In early postwar Britain, the wage gap between median and lower wage groups rose and then fell, as implied in fig. 2 and noted in Atkinson, *Changing Distribution of Earnings*, 378–79.

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widened within the bottom 90 percent since the 1970s overlaps fairly well with the set for which the World Top Incomes Database shows a rise in the share of total income going to the top 1 percent. Six countries have belonged to both sets in recent history: Australia (where gaps in wages and total incomes in the lower 90 percent widened between 1975 and 2012), New Zealand (1986–2012), Portugal (1982–2000), Sweden (1983–2011), the United Kingdom (1978–2013), and the United States (1948–2012). Two for which the gaps in wages and salaries widened (Germany 1978–2010 and Switzerland 1994–2010) did not experience a rise in their top 1 percent share. Most of the countries for which the wage-salary gaps did not widen noticeably were countries for which the top income shares also did not rise, for instance France and Japan.

These patterns raise a question: If the historical evolutions of inequality outside the top 10 percent of households so often resemble those within these top ranks and those of the top group's share of total national income, what does this suggest about the flow of causation among these developments? Looking at the kinds of factor incomes involved points to a likely asymmetry. It seems more plausible to suggest that the causation runs from inequality in human earnings to property inequality than vice versa. It is easier to see how winning the human earnings lottery could lead to a rapid accumulation of capital for an individual and his or her heirs than it is to see how having a lot of capital could buy top human earnings for the same group, even if they all go to Harvard. For this reason, too, we should put a high priority on supplementing Piketty's *Capital* with a renewed emphasis on the forces that make human earning power so unequal.

The first step toward explaining inequality movements thus calls for merging the historical movements of all income types and all income gaps into a single rate-of-change accounting. This will require an additive inequality decomposition along the lines of the Theil index of inequality. For any given population, we should decompose changes in income inequality into changes in wage-salary rates, changes in the return on marketable wealth, and shifts in the income mix and in population types.

Voice and Governance

Finding and evaluating the deeper causes of inequality movements must thus involve bringing political voice and governance back to center stage. Piketty implicitly agrees with this urgency, and repeatedly warns that inherited elite power could perpetuate economic inequality.

One of his warning devices was sounded when he predicted a rising after-tax rate of return, and, by implication, rising inequality, for the whole world up to the year 2200. How did he manage to predict the rate of return that far ahead? He did not rely on any forecast of trends in the labor-saving bias in technological change, nor in any other economic variable that drives inequality, aside from his assumptions about the savings rate. Instead, he played the political-economy trump card I alluded to earlier: "For the sake of argument, I have ... assumed that fiscal competition will gradually lead to the total disappearance of taxes on capital in

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the twenty-first century."[13] Here we see a powerful form of the familiar "race to the bottom" imagined by conservative commentators. History disagrees, however, and the classic conservative warning about this kind of capital flight has already been punctured by other empirical studies.[14] High-tax welfare states have not lost much capital to tax havens, however annoying such flight might be. Indeed, Piketty himself tried to counter such fears in his superb Chapter 14, showing—as I remarked above—that the major countries' highest-ever tax rates on top incomes and wealth were accompanied by their highest-ever growth rates in the decades between World War II and the 1970s.

Yet even if fiscal competition among nations and local governments shows no sign of having slashed top tax rates in the leading countries, their domestic political trends have achieved some such effect, as Piketty reminds us in other parts of his book. Since the 1970s, there has been an ominous accumulation of lobbying and election-buying power by the wealthiest in those same countries in which income inequality has risen the most. What can be done about this? Again, Piketty calls for a societal shift toward a broader political voice. What he seeks are intermediate mixtures of "the market and the ballot box," "capable of mobilizing the talent of different individuals ... and organizing collective decisions."[15] He hopes that this set of institutions will deliver more progressive taxation to support an optimal amount of social expenditures.

Could Piketty's goal gain support from evidence that we can achieve such a "democratic control of capital" without it costing us anything in terms of economic growth?[16] Yes, quite easily. Indeed, that supporting evidence has already been delivered by certain studies that he has discounted. What Piketty calls the "democratic control of capital" seems equivalent to the "inclusive institutions" of governance evoked in the writings of Daron Acemoglu, James Robinson, and their collaborators. Some of their conclusions afford crucial supports for Piketty's vision. Yes, the broader political voice of such inclusive governance does promote economic growth. Yes, it does so by "increasing investment, increasing schooling, encouraging economic reforms, improving public services, and reducing social unrest." And no, the strong association of inclusive politics with growth is not due to reverse causation from

13. Piketty, *Capital*, 355.
14. See, for example, Dani Rodrik, *Has Globalization Gone too Far?* (Washington, DC: Institute for International Economics, 1997); Peter H. Lindert, *Growing Public: Social Spending and Economic Growth since the Eighteenth Century* (Cambridge: Cambridge University Press, 2004), 1:227–95 and 2:82–99, and the earlier studies cited in these chapters. Note that Gabriel Zucman has found that "around 8% of the global financial wealth of households is held in tax havens, three-quarters of which goes unrecorded": Zucman, "The Missing Wealth of Nations," *Quarterly Journal of Economics* (2013): 1321–64. This magnitude raises to several issues, but such practices have not cost any advanced economy a significant share of GDP.
15. Piketty, *Capital*, 569.
16. Ibid., and throughout the fourth section of the book.

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income growth to democratization.[17] By bringing these scholarly literatures together, we can reach better predictions concerning inequality that take the influence of political voice and institutions of governance into account.

The most immediate priority, however, is to press on with integrating research on human earnings inequality into the history of the inequality of total incomes. Piketty and his collaborators continue to advance our collective knowledge on the top fringe of human earnings, including through their work on CEO pay. More broadly, we need to strive for an accounting framework that decomposes changes in total income inequality. In the end, the causal chain we are likely to emphasize will run from political inequalities to overall income inequality, affording only a secondary role to the shocks that history has inflicted on nonhuman wealth.

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17. See the following works by Acemoglu and Robinson: *Why Nations Fail*; "Income and Democracy," *American Economic Review* 98, no. 3 (2008): 808–42; and their more recent "Democracy Does Cause Growth," NBER working paper 20004, March 2014, (http://www.nber.org/papers/w20004), from which the direct quote is taken. For Piketty's puzzling dismissal of Acemoglu and Robinson, see *Capital*, 281–82, 392–93, and 402–3.

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