CAPITAL

in the Twenty-First Century

THOMAS PIKETTY

TRANSLATED BY ARTHUR GOLDHAMMER

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Th

is book is based on fi ft een years of research (1998– 2013) devoted essentially

to understanding the historical dynamics of wealth and income. Much of this

research was done in collaboration with other scholars.

My earlier work on high- income earners in France, *Les hauts revenus en*

France au 20e siècle (2001), had the extremely good fortune to win the enthu-

siastic support of Anthony Atkinson and Emmanuel Saez. Without them, my

modest Francocentric project would surely never have achieved the interna-

tional scope it has today. Tony, who was a model for me during my graduate school days, was the fi rst reader of my historical work on in e qual ity in France and immediately took up the British case as well as a number of other coun- tries. Together, we edited two thick volumes that came out in 2007 and 2010, covering twenty countries in all and constituting the most extensive database available in regard to the historical evolution of income in e qual ity. Emman- uel and I dealt with the US case. We discovered the vertiginous growth of in- come of the top 1 percent since the 1970s and 1980s, and our work enjoyed a certain infl uence in US po liti cal debate. We also worked together on a num- ber of theoretical papers dealing with the optimal taxation of capital and in- come. Th is book owes a great deal to these collaborative eff orts.

Th e book was also deeply infl uenced by my historical work with Gilles Postel- Vinay and Jean- Laurent Rosenthal on Pa ri sian estate rec ords from the French Revolution to the present. Th

is work helped me to understand in a
more intimate and vivid way the signifi cance of wealth and capital and the
problems associated with mea sur ing them. Above all, Gilles and Jean-Laurent
taught me to appreciate the many similarities, as well as diff erences, between
the structure of property around 1900–1910 and the structure of property
now.

All of this work is deeply indebted to the doctoral students and young
scholars with whom I have been privileged to work over the past fi ft een years.
Beyond their direct contribution to the research on which this book draws,
their enthusiasm and energy fueled the climate of intellectual excitement in
which the work matured. I am thinking in par tic u lar of Facundo Alvaredo,
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I also want to thank the institutions that made this project possible, starting with the École des Hautes Études en Sciences Sociales, where I have served on the faculty since 2000, as well as the École Normale Supérieure and all the other institutions that contributed to the creation of the Paris School of Economics, where I have been a professor since it was founded, and of which I served as founding director from 2005 to 2007. By agreeing to join forces and become minority partners in a project that transcended the sum of their private interests, these institutions helped to create a modest public

good, which I hope will continue to contribute to the development of a multi-

polar po liti cal economy in the twenty- fi rst century.

Finally, thanks to Juliette, Déborah, and Hélène, my three precious

daughters, for all the love and strength they give me. And thanks to Julia,

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every stage in the writing of this book have been essential. Without them, I

would not have had the energy to see this project through to completion.

Introduction

“Social distinctions can be based only on common utility.”

—Declaration of the Rights of Man and the Citizen, article 1, 1789

Th

e distribution of wealth is one of today’s most widely discussed and contro-

versial issues. But what do we really know about its evolution over the long

term? Do the dynamics of private capital accumulation inevitably lead to the

concentration of wealth in ever fewer hands, as Karl Marx believed in the

nineteenth century? Or do the balancing forces of growth, competition, and technological progress lead in later stages of development to reduced inequality and greater harmony among the classes, as Simon Kuznets thought in the twentieth century? What do we really know about how wealth and income have evolved since the eighteenth century, and what lessons can we derive from that knowledge for the century now under way?

These are the questions I attempt to answer in this book. Let me say at once that the answers contained herein are imperfect and incomplete. But they are based on much more extensive historical and comparative data than were available to previous researchers, data covering three centuries and more than twenty countries, as well as on a new theoretical framework that affords a deeper understanding of the underlying mechanisms. Modern economic growth and the diffusion of knowledge have made it possible to avoid the Marxist apocalypse but have not modified the deep structures of capital and inequality— or in any case not as much as one might have imagined in the optimistic decades following World War II. When the rate of return on capital exceeds the rate of growth of output and income, as it did in the nineteenth

century and seems quite likely to do again in the twenty- fi rst, capitalism auto-

matically generates arbitrary and unsustainable inequalities that radically un-

dermine the meritocratic values on which demo cratic societies are based.

Th

ere are nevertheless ways democracy can regain control over capitalism and

ensure that the general interest takes pre ce dence over private interests, while

preserving economic openness and avoiding protectionist and nationalist re-

actions. Th

e policy recommendations I propose later in the book tend in this

direction. Th

ey are based on lessons derived from historical experience, of

which what follows is essentially a narrative.

A Debate without Data?

Intellectual and po liti cal debate about the distribution of wealth has long

been based on an abundance of prejudice and a paucity of fact.

To be sure, it would be a mistake to underestimate the importance of the

intuitive knowledge that everyone acquires about contemporary wealth and

income levels, even in the absence of any theoretical framework or
statistical

analysis. Film and literature, nineteenth- century novels especially, are full
of

detailed information about the relative wealth and living standards of diff
er-

ent social groups, and especially about the deep structure of in e qual ity,
the

way it is justifi ed, and its impact on individual lives. Indeed, the novels of
Jane

Austen and Honoré de Balzac paint striking portraits of the distribution of

wealth in Britain and France between 1790 and 1830. Both novelists were
in-

timately acquainted with the hierarchy of wealth in their respective
societies.

Th

ey grasped the hidden contours of wealth and its inevitable implications

for the lives of men and women, including their marital strategies and per-

sonal hopes and disappointments. Th

ese and other novelists depicted the ef-

fects of in e qual ity with a verisimilitude and evocative power that no
statisti-

cal or theoretical analysis can match.

Indeed, the distribution of wealth is too important an issue to be left to economists, sociologists, historians, and phi los o phers. It is of interest to everyone, and that is a good thing. Th e concrete, physical reality of in e qual ity is visible to the naked eye and naturally inspires sharp but contradictory po liti cal judgments. Peasant and noble, worker and factory own er, waiter and banker: each has his or her own unique vantage point and sees important aspects of how other people live and what relations of power and domination exist between social groups, and these observations shape each person's judgment of what is and is not just. Hence there will always be a fundamentally subjective and psychological dimension to in e qual ity, which inevitably gives rise to po liti cal conflict that no purportedly scientifi c analysis can alleviate. Democracy will never be supplanted by a republic of experts— and that is a very good thing.

Nevertheless, the distribution question also deserves to be studied in a

systematic and methodical fashion. Without precisely defi ned sources,
meth-

ods, and concepts, it is possible to see everything and its opposite. Some
peo-

ple believe that in e qual ity is always increasing and that the world is by
defi ni-

tion always becoming more unjust. Others believe that in e qual ity is
naturally

decreasing, or that harmony comes about automatically, and that in any case

nothing should be done that might risk disturbing this happy equilibrium.

Given this dialogue of the deaf, in which each camp justifi es its own
intellec-

tual laziness by pointing to the laziness of the other, there is a role for
research

that is at least systematic and methodical if not fully scientifi c. Expert
analysis

will never put an end to the violent po liti cal confl ict that in e qual ity
inevita-

bly instigates. Social scientifi c research is and always will be tentative and
im-

perfect. It does not claim to transform economics, sociology, and history
into

exact sciences. But by patiently searching for facts and patterns and calmly analyzing the economic, social, and po liti cal mechanisms that might explain them, it can inform demo cratic debate and focus attention on the right ques- tions. It can help to redefi ne the terms of debate, unmask certain precon- ceived or fraudulent notions, and subject all positions to constant critical scrutiny. In my view, this is the role that intellectuals, including social scien- tists, should play, as citizens like any other but with the good fortune to have more time than others to devote themselves to study (and even to be paid for it— a signal privilege).

Th

ere is no escaping the fact, however, that social science research on the distribution of wealth was for a long time based on a relatively limited set of fi rmly established facts together with a wide variety of purely theoretical spec- ulations. Before turning in greater detail to the sources I tried to assemble in preparation for writing this book, I want to give a quick historical overview of previous thinking about these issues.

Malthus, Young, and the French Revolution

When classical po liti cal economy was born in En gland and France in the late

eigh teenth and early nineteenth century, the issue of distribution was already

one of the key questions. Everyone realized that radical transformations were

under way, precipitated by sustained demographic growth— a previously un-

known phenomenon— coupled with a rural exodus and the advent of the Indus-

trial Revolution. How would these upheavals aff ect the distribution of wealth,

the social structure, and the po liti cal equilibrium of Eu ro pe an society?

For Th

omas Malthus, who in 1798 published his *Essay on the Principle of*

Population, there could be no doubt: the primary threat was overpopulation.1

Although his sources were thin, he made the best he could of them. One

particularly important infl uence was the travel diary published by Arthur

Young, an En glish agronomist who traveled extensively in France, from

Calais to the Pyrenees and from Brittany to Franche- Comté, in 1787–1788, on the eve of the Revolution. Young wrote of the poverty of the French

countryside.

His vivid essay was by no means totally inaccurate. France at that time

was by far the most populous country in Eu rope and therefore an ideal place

to observe. Th

e kingdom could already boast of a population of 20 million in

1700, compared to only 8 million for Great Britain (and 5 million for En-

gland alone). Th

e French population increased steadily throughout the eigh-

teenth century, from the end of Louis XIV's reign to the demise of Louis

XVI, and by 1780 was close to 30 million. Th

ere is every reason to believe that

this unpre ce dentedly rapid population growth contributed to a stagnation of

agricultural wages and an increase in land rents in the de cades prior to the

explosion of 1789. Although this demographic shift was not the sole cause of

the French Revolution, it clearly contributed to the growing unpopularity

of the aristocracy and the existing po liti cal regime.

Nevertheless, Young's account, published in 1792, also bears the traces of nationalist prejudice and misleading comparison. Th e great agronomist found the inns in which he stayed thoroughly disagreeable and disliked the manners of the women who waited on him. Although many of his observations were banal and anecdotal, he believed he could derive universal consequences from them. He was mainly worried that the mass poverty he witnessed would lead to po liti cal upheaval. In par tic u lar, he was convinced that only the En glish po liti cal system, with separate houses of Parliament for aristocrats and com- moners and veto power for the nobility, could allow for harmonious and peace- ful development led by responsible people. He was convinced that France was headed for ruin when it decided in 1789– 1790 to allow both aristocrats and commoners to sit in a single legislative body. It is no exaggeration to say that his whole account was overdetermined by his fear of revolution in France. Whenever one speaks about the distribution of wealth, politics is never very far behind, and it is diffi cult for anyone to escape contemporary class prejudices and interests.

When Reverend Malthus published his famous *Essay* in 1798, he reached conclusions even more radical than Young’s. Like his compatriot, he was very afraid of the new po liti cal ideas emanating from France, and to reassure himself that there would be no comparable upheaval in Great Britain he argued that all welfare assistance to the poor must be halted at once and that reproduction by the poor should be severely scrutinized lest the world succumb to overpopulation leading to chaos and misery. It is impossible to understand Malthus’s exaggeratedly somber predictions without recognizing the way fear gripped much of the Eu ro pe an elite in the 1790s.

Ricardo: Th

e Principle of Scarcity

In retrospect, it is obviously easy to make fun of these prophecies of doom. It is important to realize, however, that the economic and social transformations of the late eigh teenth and early nineteenth centuries were objectively quite impressive, not to say traumatic, for those who witnessed them. Indeed, most contemporary observers— and not only Malthus and Young— shared relatively dark or even apocalyptic views of the long- run evolution of the dis- tribution of wealth and class structure of society. Th is was true in par tic u lar of David Ricardo and Karl Marx, who were surely the two most infl uential economists of the nineteenth century and who both believed that a small so- cial group— landowners for Ricardo, industrial capitalists for Marx— would inevitably claim a steadily increasing share of output and income.[2]

For Ricardo, who published his *Principles of Po liti cal Economy and Taxa- tion* in 1817, the chief concern was the long- term evolution of land prices and land rents. Like Malthus, he had virtually no genuine statistics at his disposal. He nevertheless had intimate knowledge of the capitalism of his time. Born into a family of Jewish fi nanciers with Portuguese roots, he also seems to have had fewer po liti cal prejudices than Malthus, Young, or Smith. He was infl u- enced by the Malthusian model but pushed the argument farther. He was above all interested in the following logical paradox. Once both population and output begin to grow steadily, land tends to become increasingly scarce relative to other goods. The law of supply and demand then implies that the price of land will rise continuously, as will the rents paid to landlords. The landlords will therefore claim a growing share of national income, as the share available to the rest of the population decreases, thus upsetting the social

equilibrium. For Ricardo, the only logically and po liti cally acceptable answer was to impose a steadily increasing tax on land rents.

This somber prediction proved wrong: land rents did remain high for an extended period, but in the end the value of farm land inexorably declined relative to other forms of wealth as the share of agriculture in national income decreased. Writing in the 1810s, Ricardo had no way of anticipating the importance of technological progress or industrial growth in the years ahead. Like Malthus and Young, he could not imagine that humankind would ever be totally freed from the alimentary imperative.

His insight into the price of land is nevertheless interesting: the “scarcity principle” on which he relied meant that certain prices might rise to very high levels over many de cades. This could well be enough to destabilize entire soci- eties. The price system plays a key role in coordinating the activities of mil- lions of individuals— indeed, today, billions of individuals in the new global economy. The problem is that the price system knows neither limits nor morality.

It would be a serious mistake to neglect the importance of the scarcity principle for understanding the global distribution of wealth in the twenty- fi rst century. To convince oneself of this, it is enough to replace the price of farmland in Ricardo’s model by the price of urban real estate in major world capitals, or, alternatively, by the price of oil. In both cases, if the trend over the period 1970– 2010 is extrapolated to the period 2010– 2050 or 2010– 2100, the result is economic, social, and po liti cal disequilibria of considerable magni-

tude, not only between but within countries— disequilibria that inevitably

call to mind the Ricardian apocalypse.

To be sure, there exists in principle a quite simple economic mechanism

that should restore equilibrium to the pro cess: the mechanism of supply and

demand. If the supply of any good is insuffi

cient, and its price is too high,

then demand for that good should decrease, which should lead to a decline in

its price. In other words, if real estate and oil prices rise, then people should

move to the country or take to traveling about by bicycle (or both). Never

mind that such adjustments might be unpleasant or complicated; they might

also take de cades, during which landlords and oil well own ers might well ac-

cumulate claims on the rest of the population so extensive that they could

easily come to own everything that can be owned, including rural real estate

and bicycles, once and for all.[3] As always, the worst is never certain to arrive.

It is much too soon to warn readers that by 2050 they may be paying rent to the emir of Qatar. I will consider the matter in due course, and my answer will be more nuanced, albeit only moderately reassuring. But it is important for now to understand that the interplay of supply and demand in no way rules out the possibility of a large and lasting divergence in the distribution of

wealth linked to extreme changes in certain relative prices. Th

is is the princi-

pal implication of Ricardo's scarcity principle. But nothing obliges us to roll

the dice.

Marx: Th

e Principle of Infi nite Accumulation

By the time Marx published the fi rst volume of *Capital* in 1867, exactly one-

half century aft er the publication of Ricardo's *Principles,* economic and social

realities had changed profoundly: the question was no longer whether farmers could feed a growing population or land prices would rise sky high but rather how to understand the dynamics of industrial capitalism, now in full blossom.

Th

e most striking fact of the day was the misery of the industrial proletariat. Despite the growth of the economy, or perhaps in part because of it, and because, as well, of the vast rural exodus owing to both population growth and increasing agricultural productivity, workers crowded into urban slums. The working day was long, and wages were very low. A new urban misery emerged, more visible, more shocking, and in some respects even more extreme than the rural misery of the Old Regime. *Germinal, Oliver Twist,* and *Les Misérables* did not spring from the imaginations of their authors, any more than did laws limiting child labor in factories to children older than eight (in France in 1841) or ten in the mines (in Britain in 1842). Dr. Villermé's *Tableau de l' état physique et moral des ouvriers employés dans les manufactures,* published in France in 1840 (leading to the passage of a timid new child labor law in 1841), described the same sordid reality as *The Condition of the Working Class in En gland,* which Friedrich Engels published in 1845.[4]

In fact, all the historical data at our disposal today indicate that it was not until the second half— or even the fi nal third— of the nineteenth century that a signifi cant rise in the purchasing power of wages occurred. From the

fi rst to the sixth de cade of the nineteenth century, workers' wages stagnated

at very low levels— close or even inferior to the levels of the eigh teenth and

previous centuries. Th

is long phase of wage stagnation, which we observe in

Britain as well as France, stands out all the more because economic growth

was accelerating in this period. Th

e capital share of national income— industrial

profi ts, land rents, and building rents— insofar as can be estimated with the

imperfect sources available today, increased considerably in both countries in

the fi rst half of the nineteenth century.5 It would decrease slightly in the fi nal

de cades of the nineteenth century, as wages partly caught up with growth.

Th

e data we have assembled nevertheless reveal no structural decrease in in e-

qual ity prior to World War I. What we see in the period 1870– 1914 is at best a stabilization of in e qual ity at an extremely high level, and in certain respects an endless inegalitarian spiral, marked in par tic u lar by increasing concentra- tion of wealth. It is quite diffi cult to say where this trajectory would have led without the major economic and po liti cal shocks initiated by the war. With the aid of historical analysis and a little perspective, we can now see those shocks as the only forces since the Industrial Revolution powerful enough to reduce in e qual ity.

In any case, capital prospered in the 1840s and industrial profi ts grew, while labor incomes stagnated. Th is was obvious to everyone, even though in those days aggregate national statistics did not yet exist. It was in this con- text that the fi rst communist and socialist movements developed. Th e cen- tral argument was simple: What was the good of industrial development, what was the good of all the technological innovations, toil, and population movements if, aft er half a century of industrial growth, the condition of the masses was still just as miserable as before, and all lawmakers could do was prohibit factory labor by children under the age of eight? Th

e bank-

ruptcy of the existing economic and po liti cal system seemed obvious. People

therefore wondered about its long- term evolution: what could one say

about it?

Th

is was the task Marx set himself. In 1848, on the eve of the "spring of

nations" (that is, the revolutions that broke out across Eu rope that spring), he

published *Th*

e Communist Manifesto, a short, hard- hitting text whose fi rst

chapter began with the famous words "A specter is haunting Europe— the

specter of communism."6 Th

e text ended with the equally famous prediction

of revolution: "Th

e development of Modern Industry, therefore, cuts from

under its feet the very foundation on which the bourgeoisie produces and ap-

propriates products. What the bourgeoisie therefore produces, above all, are its own gravediggers. Its fall and the victory of the proletariat are equally inevitable.”

Over the next two de cades, Marx labored over the voluminous treatise that would justify this conclusion and propose the fi rst scientifi c analysis of capitalism and its collapse. Th is work would remain unfi nished: the fi rst vol- ume of *Capital* was published in 1867, but Marx died in 1883 without having completed the two subsequent volumes. His friend Engels published them posthumously aft er piecing together a text from the sometimes obscure frag- ments of manuscript Marx had left behind.

Like Ricardo, Marx based his work on an analysis of the internal logical contradictions of the capitalist system. He therefore sought to distinguish himself from both bourgeois economists (who saw the market as a self- regulated system, that is, a system capable of achieving equilibrium on its own without major deviations, in accordance with Adam Smith’s image of “the invisible hand” and Jean- Baptiste Say’s “law” that production creates its own demand), and utopian socialists and Proudhonians, who in Marx's view were content to denounce the misery of the working class without proposing a truly scientifi c analysis of the economic pro cesses responsible for it.7 In short, Marx took the Ricardian model of the price of capital and the principle of scarcity as the basis of a more thorough analysis of the dynamics of capitalism in a world where capital was primarily industrial (machinery, plants, etc.) rather than landed property, so that in principle there was no limit to the amount of capital that could be accumulated. In fact, his principal conclusion was what one might call the "principle of infi nite accumulation," that is, the inexorable tendency for capital to accumulate and become concentrated in ever fewer hands, with no natural limit to the pro cess. Th

is is the basis of

Marx's prediction of an apocalyptic end to capitalism: either the rate of re-turn on capital would steadily diminish (thereby killing the engine of accu-mulation and leading to violent confl ict among capitalists), or capital's share of national income would increase indefi nitely (which sooner or later would unite the workers in revolt). In either case, no stable socioeconomic or po liti-cal equilibrium was possible.

Marx’s dark prophecy came no closer to being realized than Ricardo’s. In the last third of the nineteenth century, wages fi nally began to increase: the improvement in the purchasing power of workers spread everywhere, and this changed the situation radically, even if extreme inequalities persisted and in

some respects continued to increase until World War I. The communist revo-lution did indeed take place, but in the most backward country in Eu rope, Rus sia, where the Industrial Revolution had scarcely begun, whereas the most advanced Eu ro pe an countries explored other, social demo cratic avenues—fortunately for their citizens. Like his pre de ces sors, Marx totally neglected the possibility of durable technological progress and steadily increasing pro-ductivity, which is a force that can to some extent serve as a counterweight to the pro cess of accumulation and concentration of private capital. He no doubt lacked the statistical data needed to refi ne his predictions. He probably suff ered as well from having decided on his conclusions in 1848, before em- barking on the research needed to justify them. Marx evidently wrote in great po liti cal fervor, which at times led him to issue hasty pronouncements from which it was diffi cult to escape. Th at is why economic theory needs to be rooted in historical sources that are as complete as possible, and in this respect Marx did not exploit all the possibilities available to him.[8] What is more, he devoted little thought to the question of how a society in which private capital had been totally abolished would be or ga nized po liti cally and eco- nomically— a complex issue if ever there was one, as shown by the tragic totalitarian experiments undertaken in states where private capital was abolished.

Despite these limitations, Marx's analysis remains relevant in several re- spects. First, he began with an important question (concerning the unpre cedented concentration of wealth during the Industrial Revolution) and tried to answer it with the means at his disposal: economists today would do well to take inspiration from his example. Even more important, the principle of infi nite accumulation that Marx proposed contains a key insight, as valid for the study of the twenty- fi rst century as it was for the nineteenth and in some respects more worrisome than Ricardo's principle of scarcity. If the rates of population and productivity growth are relatively low, then accumulated wealth naturally takes on considerable importance, especially if it grows to extreme proportions and becomes socially destabilizing. In other words, low growth cannot adequately counterbalance the Marxist principle of infi nite accumulation: the resulting equilibrium is not as apocalyptic as the one predicted by Marx but is nevertheless quite disturbing. Accumulation ends at a fi nite level, but that level may be high enough to be destabilizing. In par tic ular, the very high level of private wealth that has been attained since the 1980s

and 1990s in the wealthy countries of Eu rope and in Japan, mea sured in years of national income, directly refl ects the Marxian logic.

From Marx to Kuznets, or Apocalypse to Fairy Tale

Turning from the nineteenth- century analyses of Ricardo and Marx to the twentieth- century analyses of Simon Kuznets, we might say that economists' no doubt overly developed taste for apocalyptic predictions gave way to a similarly excessive fondness for fairy tales, or at any rate happy endings. According to Kuznets's theory, income in e qual ity would automatically decrease in advanced phases of capitalist development, regardless of economic policy choices or other diff erences between countries, until eventually it stabilized at an acceptable level. Proposed in 1955, this was really a theory of the magical postwar years referred to in France as the "Trente Glorieuses," the thirty glorious years from 1945 to 1975.9 For Kuznets, it was enough to be patient, and before long growth would benefi t everyone. Th e philosophy of the moment was summed up in a single sentence: "Growth is a rising tide that lift s all boats." A similar optimism can also be seen in Robert Solow's 1956 analysis of the conditions necessary for an economy to achieve a "balanced growth path," that is, a growth trajectory along which all variables— output, incomes, profits, wages, capital, asset prices, and so on— would progress at the same pace, so that every social group would benefi t from growth to the same degree, with no major deviations from the norm.10 Kuznets's position was thus diametrically opposed to the Ricardian and Marxist idea of an inegalitarian spiral and antithetical to the apocalyptic predictions of the nineteenth century.

In order to properly convey the considerable infl uence that Kuznets's theory enjoyed in the 1980s and 1990s and to a certain extent still enjoys today, it is important to emphasize that it was the fi rst theory of this sort to rely on a formidable statistical apparatus. It was not until the middle of the twentieth century, in fact, that the fi rst historical series of income distribution statistics became available with the publication in 1953 of Kuznets's monumental *Shares of Upper Income Groups in Income and Savings.* Kuznets's series dealt with only one country (the United States) over a period of thirty- fi ve years

(1913– 1948). It was nevertheless a major contribution, which drew on two sources of data totally unavailable to nineteenth- century authors: US federal income tax returns (which did not exist before the creation of the income tax

in 1913) and Kuznets's own estimates of US national income from a few years earlier. Th is was the very fi rst attempt to mea sure social in e qual ity on such an ambitious scale.[11]

It is important to realize that without these two complementary and in- dispensable datasets, it is simply impossible to mea sure in e qual ity in the in- come distribution or to gauge its evolution over time. To be sure, the fi rst attempts to estimate national income in Britain and France date back to the late seventeenth and early eigh teenth century, and there would be many more such attempts over the course of the nineteenth century. But these were iso- lated estimates. It was not until the twentieth century, in the years between the two world wars, that the fi rst yearly series of national income data were developed by economists such as Kuznets and John W. Kendrick in the United States, Arthur Bowley and Colin Clark in Britain, and L. Dugé de Bernonville in France. Th is type of data allows us to mea sure a country's total income. In order to gauge the share of high incomes in national income, we also need statements of income. Such information became available when many countries adopted a progressive income tax around the time of World War I (1913 in the United States, 1914 in France, 1909 in Britain, 1922 in India, 1932 in Argentina).[12]

It is crucial to recognize that even where there is no income tax, there are still all sorts of statistics concerning what ever tax basis exists at a given point in time (for example, the distribution of the number of doors and windows by *département* in nineteenth- century France, which is not without interest), but these data tell us nothing about incomes. What is more, before the re- quirement to declare one's income to the tax authorities was enacted in law, people were oft en unaware of the amount of their own income. Th e same is true of the corporate tax and wealth tax. Taxation is not only a way of requiring all citizens to contribute to the fi nancing of public expenditures and proj-

ects and to distribute the tax burden as fairly as possible; it is also useful for

establishing classifi cations and promoting knowledge as well as demo cratic

transparency.

In any event, the data that Kuznets collected allowed him to calculate the

evolution of the share of each decile, as well as of the upper centiles, of the

income hierarchy in total US national income. What did he fi nd? He noted a

sharp reduction in income in e qual ity in the United States between 1913 and

1948. More specifi cally, at the beginning of this period, the upper decile of the

income distribution (that is, the top 10 percent of US earners) claimed 45–50

percent of annual national income. By the late 1940s, the share of the top de-

cile had decreased to roughly 30– 35 percent of national income. Th

is decrease

of nearly 10 percentage points was considerable: for example, it was equal to half the income of the poorest 50 percent of Americans.13 The reduction of inequality was clear and incontrovertible. This was news of considerable importance, and it had an enormous impact on economic debate in the postwar era in both universities and international organizations.

Malthus, Ricardo, Marx, and many others had been talking about inequalities for decades without citing any sources whatsoever or any methods for comparing one era with another or deciding between competing hypotheses. Now, for the first time, objective data were available. Although the information was not perfect, it had the merit of existing. What is more, the work of compilation was extremely well documented: the weighty volume that Kuznets published in 1953 revealed his sources and methods in the most minute detail, so that every calculation could be reproduced. And besides that, Kuznets was the bearer of good news: inequality was shrinking.

The Kuznets Curve: Good News in the Midst of the Cold War

In fact, Kuznets himself was well aware that the compression of high US incomes between 1913 and 1948 was largely accidental. It stemmed in large part from multiple shocks triggered by the Great Depression and World War II and had little to do with any natural or automatic pro cess. In his 1953 work, he analyzed his series in detail and warned readers not to make hasty generalizations. But in December 1954, at the Detroit meeting of the American Economic Association, of which he was president, he off ered a far more optimistic interpretation of his results than he had given in 1953. It was this lecture, published in 1955 under the title "Economic Growth and Income In e qual ity," that gave rise to the theory of the "Kuznets curve."

According to this theory, in e qual ity everywhere can be expected to follow a "bell curve." In other words, it should fi rst increase and then decrease over the course of industrialization and economic development. According to Kuznets, a fi rst phase of naturally increasing in e qual ity associated with the early stages of industrialization, which in the United States meant, broadly speaking, the nineteenth century, would be followed by a phase of sharply decreasing in e qual ity, which in the United States allegedly began in the fi rst half of the twentieth century.

Kuznets's 1955 paper is enlightening. Aft er reminding readers of all the reasons for interpreting the data cautiously and noting the obvious importance of exogenous shocks in the recent reduction of in e qual ity in the United States, Kuznets suggests, almost innocently in passing, that the internal logic of economic development might also yield the same result, quite apart from any policy intervention or external shock. Th e idea was that inequalities increase in the early phases of industrialization, because only a minority is prepared to benefi t from the new wealth that industrialization brings. Later, in more advanced phases of development, in e qual ity automatically decreases as a larger and larger fraction of the population partakes of the fruits of economic growth.14

Th

e "advanced phase" of industrial development is supposed to have begun toward the end of the nineteenth or the beginning of the twentieth century in the industrialized countries, and the reduction of in e qual ity observed in the United States between 1913 and 1948 could therefore be portrayed as one instance of a more general phenomenon, which should theoretically reproduce itself everywhere, including underdeveloped countries then mired in postcolonial poverty. Th

e data Kuznets had presented in his 1953 book suddenly became a powerful po liti cal weapon.15 He was well aware of the highly speculative nature of his theorizing.16 Nevertheless, by presenting such an optimistic theory in the context of a "presidential address" to the main professional association of US economists, an audience that was inclined to believe and disseminate the good news delivered by their prestigious leader, he knew that he would wield considerable infl uence: thus the "Kuznets curve" was born. In order to make sure that everyone understood what was at stake, he took care to remind his listeners that the intent of his optimistic predictions was quite simply to maintain the underdeveloped countries "within the orbit of the free world."[17] In large part, then, the theory of the Kuznets curve was a product of the Cold War.

To avoid any misunderstanding, let me say that Kuznets's work in estab- lishing the fi rst US national accounts data and the fi rst historical series of in e qual ity mea sures was of the utmost importance, and it is clear from read- ing his books (as opposed to his papers) that he shared the true scientifi c ethic. In addition, the high growth rates observed in all the developed coun-

tries in the post– World War II period were a phenomenon of great signifi - cance, as was the still more signifi cant fact that all social groups shared in the fruits of growth. It is quite understandable that the Trente Glorieuses fos- tered a certain degree of optimism and that the apocalyptic predictions of the nineteenth century concerning the distribution of wealth forfeited some of their popularity.

Nevertheless, the magical Kuznets curve theory was formulated in large part for the wrong reasons, and its empirical underpinnings were extremely fragile. Th e sharp reduction in income in e qual ity that we observe in almost

all the rich countries between 1914 and 1945 was due above all to the world

wars and the violent economic and po liti cal shocks they entailed (especially

for people with large fortunes). It had little to do with the tranquil pro cess of

intersectoral mobility described by Kuznets.

Putting the Distributional Question Back at the Heart of

Economic Analysis

Th

e question is important, and not just for historical reasons. Since the 1970s,

income in e qual ity has increased signifi cantly in the rich countries, especially

the United States, where the concentration of income in the fi rst de cade of the

twenty- fi rst century regained— indeed, slightly exceeded— the level attained

in the second de cade of the previous century. It is therefore crucial to under-

stand clearly why and how in e qual ity decreased in the interim. To be sure, the

very rapid growth of poor and emerging countries, especially China, may well prove to be a potent force for reducing inequalities at the global level, just as the growth of the rich countries did during the period 1945– 1975. But this pro cess has generated deep anxiety in the emerging countries and even deeper anxiety in the rich countries. Furthermore, the impressive disequilib- ria observed in recent de cades in the fi nancial, oil, and real estate markets have naturally aroused doubts as to the inevitability of the "balanced growth path" described by Solow and Kuznets, according to whom all key economic variables are supposed to move at the same pace. Will the world in 2050 or 2100 be owned by traders, top managers, and the superrich, or will it belong to the oil- producing countries or the Bank of China? Or perhaps it will be owned by the tax havens in which many of these actors will have sought ref- uge. It would be absurd not to raise the question of who will own what and

simply to assume from the outset that growth is naturally "balanced" in the long run.

In a way, we are in the same position at the beginning of the twenty- fi rst century as our forebears were in the early nineteenth century: we are witnessing impressive changes in economies around the world, and it is very diffi cult to know how extensive they will turn out to be or what the global distribution of wealth, both within and between countries, will look like several decades from now. Th e economists of the nineteenth century deserve im mense credit for placing the distributional question at the heart of economic analysis and for seeking to study long- term trends. Th eir answers were not always satisfactory, but at least they were asking the right questions. Th ere is no fundamental reason why we should believe that growth is automatically balanced. It is long since past the time when we should have put the question of in e qual ity back at the center of economic analysis and begun asking questions fi rst raised in the nineteenth century. For far too long, economists have neglected the distribution of wealth, partly because of Kuznets's optimistic conclusions and partly because of the profession's undue enthusiasm for simplistic mathematical models based on so- called representative agents.[18] If the question of in e qual ity is again to become central, we must begin by gathering as extensive as possible a set of historical data for the purpose of understanding past and present trends. For it is by patiently establishing facts and patterns and then comparing diff erent countries that we can hope to identify the mechanisms at work and gain a clearer idea of the future.

The Sources Used in This Book

This book is based on sources of two main types, which together make it possible to study the historical dynamics of wealth distribution: sources dealing with the in e qual ity and distribution of income, and sources dealing with the distribution of wealth and the relation of wealth to income.

To begin with income: in large part, my work has simply broadened the spatial and temporal limits of Kuznets's innovative and pioneering work on the evolution of income in e qual ity in the United States between 1913 and 1948.

In this way I have been able to put Kuznets's fi ndings (which are quite accu-rate) into a wider perspective and thus radically challenge his optimistic view of the relation between economic development and the distribution of wealth.

Oddly, no one has ever systematically pursued Kuznets's work, no doubt in part because the historical and statistical study of tax rec ords falls into a sort of academic no- man's-land, too historical for economists and too economistic for historians. Th at is a pity, because the dynamics of income in e qual ity can only be studied in a long- run perspective, which is possible only if one makes use of tax rec ords.[19]

I began by extending Kuznets's methods to France, and I published the results of that study in a book that appeared in 2001.[20] I then joined forces with several colleagues— Anthony Atkinson and Emmanuel Saez foremost among them— and with their help was able to expand the coverage to a much wider range of countries. Anthony Atkinson looked at Great Britain and a number of other countries, and together we edited two volumes that appeared in 2007 and 2010, in which we reported the results for some twenty countries throughout the world.21 Together with Emmanuel Saez, I extended Kuznets's series for the United States by half a century.22 Saez himself looked at a number of other key countries, such as Canada and Japan. Many other investigators contributed to this joint eff ort: in par tic u lar, Facundo Alvaredo studied Argentina, Spain, and Portugal; Fabien Dell looked at Germany and Switzerland; and Abhijit Banerjeee and I investigated the Indian case. With the help of Nancy Qian I was able to work on China. And so on.23

In each case, we tried to use the same types of sources, the same methods, and the same concepts. Deciles and centiles of high incomes were estimated from tax data based on stated incomes (corrected in various ways to ensure temporal and geographic homogeneity of data and concepts). National income and average income were derived from national accounts, which in some cases had to be fl eshed out or extended. Broadly speaking, our data series begin in each country when an income tax was established (generally between 1910 and 1920 but in some countries, such as Japan and Germany, as early as the 1880s and in other countries somewhat later). Th ese series are regularly updated and at this writing extend to the early 2010s.

Ultimately, the World Top Incomes Database (WTID), which is based on the joint work of some thirty researchers around the world, is the largest historical database available concerning the evolution of income in e qual ity; it is the primary source of data for this book.24

Th e book's second most important source of data, on which I will actually draw fi rst, concerns wealth, including both the distribution of wealth and its

relation to income. Wealth also generates income and is therefore important on the income study side of things as well. Indeed, income consists of two components: income from labor (wages, salaries, bonuses, earnings from nonwage labor, and other remuneration statutorily classifi ed as labor related) and income from capital (rent, dividends, interest, profi ts, capital gains, royalties,