Crooked Timber Seminar on Thomas Piketty's Capital in the 21st Century

Edited by Henry Farrell.

Notes and Acknowledgments

Chris Bertram, Henry Farrell and Ingrid Robeyns worked to put this seminar together, with help and advice from other Crooked Timber contributors. Suresh Naidu first suggested the idea of a seminar on this book.

Contributors

- Danielle Allen is a professor of government and director of the Edmond J. Safra Center for Ethics at Harvard University.
- Elizabeth Anderson is the Arthur F. Thurnau Professor and John Dewey Distinguished University Professor of Philosophy and Women's Studies at the University of Michigan.
- Kenneth Arrow is the Joan Kenney Professor of Economics at Stanford, and is a winner of the Nobel Memorial Prize in Economics.
- Chris Bertram is Professor of Social and Political Philosophy at the University of Bristol.
- Ann Cudd is Professor of Philosophy and Dean of Arts and Sciences at Boston University.
- Henry Farrell is an associate professor of political science and international affairs at George Washington University.
- Olivier Godechot is professor of sociology and Co-Director of the Max-Planck Sciences-Po Center on Coping with Instability in Market Societies.
- Margaret Levi is the Sara Miller McCune Director of the Center for Advanced Studies in the Behavioral Sciences and Professor of Political Science at Stanford University.
- JW Mason is an assistant professor of economics at John Jay College, CUNY.

- Martin O'Neill is a senior lecturer in politics at the University of York.
- John Quiggin is an Australian Research Council Laureate Fellow at the University of Queensland.
- Miriam Ronzoni is a senior lecturer in political theory at the University of Manchester.
- Thomas Piketty is Professor of Economics at EHESS and at the Paris School of Economics.

Elizabeth Anderson - The Politics Behind Piketty

Thomas Piketty traces widening inequality in rich countries since the early 1970s to increasing shares of income claimed by the top 1%. This trend is decomposed into the increasing share of income accruing to capital ownership, and the increasing share of labor income claimed by corporate executives and financiers. Piketty shows that the increasing share of labor income claimed by the top 1% is neither deserved nor economically useful, in the sense of stimulating better products and services, increasing economic growth, or providing other benefits to the 99%. Because he defines r, the return on capital, as the pure return to passive ownership (excluding returns to capital that could be traced to entrepreneurial activity or business judgment), it is evident that capital's share of income is also undeserved. But is it economically useful? Piketty misses an opportunity to connect his analysis to a critique of the ideology and associated politics that have driven increasing inequality since the early 1970s. While he rightly claims that the distribution of income and wealth is a deeply political matter, and connects increasing economic inequality to the increasing political clout of the top 1%, he does not identify political decisions, other than cuts in marginal tax rates on top incomes, that lie behind inequality trends. Filling in the ideological and political stories gives us some clues as to policy instruments, other than the tax code, needed to reverse the ominous trends he documents.

On the ideological front, several theories served to rationalize policy shifts in favor of increasing capital shares and top labor incomes. The stagflation of the 1970s was successfully blamed on Keynesian economics, fiscal irresponsibility, a bloated welfare state, militant labor unions, state regulation of the economy, and supposedly incentive-destroying high marginal tax rates on capital incomes and the rich. At the same time, the ideology of maximizing shareholder value took hold. Corporate executives who formerly lived merely like an especially comfortable middle class, and who gained prestige from sharing rents widely among corporate stakeholders, narrowed their focus to serving capital interests exclusively, and obtained compensation packages that tied their fates to that goal alone.

All of this might have made sense were it true that the only way to increase profits is to do things that add net value to the economy in which everyone else claims shares. But that's the hard way to increase capital's share of income, and thereby the income of top executives. It's much easier for the top 1% to make money by creating and exploiting opportunities to gain at the expense of everyone else. Under the guise of 'free' markets, what was created was an alternative set of rules and practices rigged to serve capital owners and executives at the expense of ordinary workers, retirees, and young people. Let us count the ways.

1. IP monopolies have been strengthened worldwide. So-called 'free' trade deals have replaced labor-protecting tariffs with steeply increased capital-protecting IP regulations. Copyright terms have been extended far beyond any credible incentive effects.

2. Central banks across the OECD have practiced austerity, or failed to make unemployment reduction a priority, thereby gratuitously increasing unemployment to serve capital interests. Fiscal policy, too, has kept demand for labor weak, even while profits have soared. That $r>g$ is due in part to g-depressing monetary and fiscal policies.

3. Laws and regulations regarding credit and bankruptcy have been rewrit-

ten to favor creditors. In the U.S., bankruptcy no longer fully discharges personal debts for many people. Millions of college students in the U.S. labor under mountains of undischargeable student debt. Usurious payday and title loans reinforce the cycle of poverty for more millions. Many creditors' business models are predatory, in which profits are generated by terms that trap people into spirals of debt, default, and accumulating fines and fees, and are deliberately designed to prevent people from paying off the loan, so they must pay interest and fees for a longer period. Regulators failed to reduce the principal owed on home loans after the financial crisis, gratuitously extending the length of the recession. In the EU, too, German-led monetary policy has strongly favored creditors over debtors, leading to recession and mass unemployment in the peripheral Eurozone countries.

4. Antitrust enforcement has weakened, increasing the dominance of big firms that exploit their market power, fattening profits and executive compensation.

5. Financial deregulation has driven capital away from growth-supporting investment, toward speculative trading that increases financial instability. It has also led to a diversion of talent and energy into negative value-added activities such as high-frequency trading, frontrunning, and LIBOR manipulation. The rise of banks 'too big to fail' has led to a culture of impunity and lawlessness in the financial industry. Notwithstanding massive fraud in the mortgage industry and serial criminality on the part of major banks such as J. P. Morgan, virtually no guilty bankers have been prosecuted for their roles in the financial crisis, and fines capture only a small fraction of profits from illegal dealings. All of this has increased inequality.

6. On the labor side, in the U.S., basic employment laws are unenforced or carry penalties too low to deter, leading to massive wage and tip theft, forced work off the clock, and numerous other violations, especially at the low end of the wage scale. Employees are routinely misclassified as independent contractors, as a way to escape requirements to provide benefits, pay social insurance taxes, and fob business expenses onto workers. Young workers performing useful services for their employees are routinely misclassified as interns, so they don't have to be paid at all.

7. The rise of contingent and temporary labor and labor subcontracting has also enabled corporations to shed responsibilities for providing decent pay, benefits, and working conditions–a pure shift of income from labor to capital (or, for nonprofits such as universities, a pure shift of income from contingent workers such as adjunct faculty to the pockets of top-level administrators). Franchising performs similar functions, whereby the franchisor imposes costs and pricing structures on individual franchisees that all-but-guarantee that the latter cannot clear a profit without violating labor laws. Outsourcing abroad, including to enterprises that exploit forced and defrauded workers, magnifies these problems. These practices are due to a failure of employment law to close loopholes that empower firms to pretend that their employees are someone else's responsibility.

8. U.S. law has systematically failed to protect workers' contractual pension rights. During stock booms, firms are permitted to skim supposedly excess profits in their pension funds for distribution to shareholders. In the inevitable bear market that follows, they dump now severely underfunded pension funds as hopelessly insolvent. Public pensions, too, have been underfunded or raided for decades.

9. The shift from defined-benefit pensions to defined-contribution retirement

plans has put the onus on naive investors to invest their savings. Yet financial advisors are free to peddle high-fee low-return investments to them, pretending to act in their interests, leading to returns on 401(k) plans for the ordinary investor that are well below r. While regulations have been proposed to end this practice in the U.S., its prevalence represents a pure shift of income and wealth from labor to capital, and from ordinary workers to high-paid financiers.

10. In the U.S., labor laws protecting the right to organize have been violated with impunity at least since the 1980s. The decline of labor unions, in turn, has led to a decline in labor's political influence for all policies affecting workers, whether they are unionized or not.

11. In the U.S., the minimum wage has not kept up with inflation. Without the backstop of a minimum wage, much of the incidence of publicly provided benefits to low-wage workers, such as food stamps and the earned-income tax credit, accrues to major corporations, who don't have to pay as high wages to induce the same labor supply.

From an ideological point of view, much of this can and has been peddled to the public as 'free' markets and 'deregulation.' The reality exposes the vacuity of these very ideas. In any advanced economy, the state must be involved in promulgating the constitutive rules of the economy. It can no more get out of the business of regulating the economy than the Commissioner of Baseball can get out of the business of promulgating the rules of Major League Baseball. The only real question is, in whose interests are the rules designed?

Ideology matters for politics. Once people have acquired income or wealth through the market, they feel strongly entitled to it. In the U.S. and increasingly in the rest of the OECD, the population at large, taken in by such representations, is reluctant to tax. Redistributing income and wealth by means of taxation, as Piketty proposes, becomes harder once people have it in their hands. We need to scrutinize the rules by which income and wealth get generated through the market, before it is taxed. They have been changing in a plutocratic direction for the past 45 years. The rule changes have not only increased r (at least for the top 1%), but also depressed g, by increasing monopoly power, shifting savings from real investment to speculation and scams, shifting top talent from production to value-extraction, and depressing aggregate demand.

Getting this story out is critical to changing politics. For plutocracy still must nod to what we might call 'weak' Rawlsianism: that inequality cannot be justified without showing that it delivers some benefits to the 99%. (It's not for nothing that one of the leading arms of plutocracy is called the Club for Growth.) Exposing the ways the game is rigged, as Elizabeth Warren has been doing, should open more levers to change than focusing on taxes alone–levers that should also help limit the pace of increasing inequality by raising g.

Margaret Levi - A New Agenda for the Social Sciences

What a marvelous and ambitious book this is. I share all the reasons for praising it: its breadth, its ambition, its grasp of history, and its use of hard-earned statistical series. And I love the way Piketty relies on various novels to paint the picture of class and economic strategies in periods long gone. I also share many of the criticisms, particularly by my brethren in political science, political theory, and political sociology: its failure to comprehend the complexity of power, politics or institutions.

Let me first vent one minor irritant. Novels play an important purpose in this book by giving us a flavor of societies, their norms about property and inheritance, and the influence those norms have on the way people construct their lives. We learn of the novels of Austin and Balzac, but what of the writers addressing the reactions of people to the economies of the twentieth, let alone twenty-first century? Dystopian novels abound, capturing the fears of technology and of environmental disaster, but there are also those that reveal the lives of those affected by Wall Street, the decline of the family farm, the transformation of industry and work. We get a somewhat nuanced sense of the life of the striver and struggler of the nineteenth century but little sense of those who inhabit the current century—or even the last.

Now to the main points. Others, particularly some of those contributing to the *Crooked Timber* collection already offer telling critiques of the weaknesses in Piketty's political analysis. I do not want to rehearse well-tread ground but focus instead on issues where I think Piketty requires the help of other kinds of social scientists to enhance his important agenda. In particular, I will discuss two work-related issues: technology and the changing nature of jobs. Then I shall turn to more standard political questions: the roles of the state, organized interests, and beliefs.

Piketty provides the crucial building blocks with his documentation of inequality and his arguments about why it is the natural outgrowth of the kinds of economies we have built. The grand (some would say grandiose) title of his opus—but even more importantly the work itself—makes him a worthy successor of the great political economists he echoes: Adam Smith and Karl Marx. But for Piketty neither the invisible hand nor class conflict will lead to a reduction in inequality. In the spirit of John Maynard Keynes, his panacea is fiscal. However, the point of the taxes Piketty advocates is not to resuscitate an economy in depression but rather to inhibit the continued growth of inequality in income and wealth with all its disastrous consequences for human welfare as well as the economy.

As erudite and thoughtful as Piketty is and despite the length and detailed scholarship represented in *Capital in the Twenty-First Century*, no single author—even one calling on collaborators in his field as good as Anthony Atkinson, Gilles Postel-Vinay, Jean-Laurent Rosenthal, and Emmanual Saez—can be expert on everything. To make his case even stronger, let alone take the next step in realizing effective change, Piketty needs the support of those better schooled in political science, political sociology, political philosophy, political history, and political psychology, disciplines to which he tips his hat but on which he barely relies.

The changing nature of the workplace

While Piketty focuses on the macro changes in inequality overall, he neglects how work relationships are changing in ways that also produce inequity and inequality. One of the recent projects of CASBS (the Center for Advanced Study in the Behavioral Sciences), which I direct, is on the Future of Work and Workers. We have an on-going series in *Pacific Standard* documenting the transformations in jobs caused by new technologies and new kinds of work. Despite the disagreements revealed in the essays by scholars, technologists, labor activists, business leaders, politicians, and policy analysts about what the world of work will look like in twenty years or so, a few clear outlines emerge. Whether robots eradicate human effort or assist it, advanced industrial economies are likely to have fewer and fewer high-end jobs, more and more service jobs, and a significant decrease in full-time occupations with benefits. In the developing world—indeed in the entire world—various forms of bonded labor and servitude are re-emerging. Where workers lack locations to congregate regularly—be it around water coolers, at dispatch halls, or in factories—collective action will need to evolve to ensure the kind of worker voice and pressure to which governments and politicians respond and that serve to promote the kinds of protections and tax systems Piketty advocates.

A theory of the state and government

Government becomes a major player in Piketty's *Capital.* It is government that imposes taxes and provides social security, key components of an equalizing program. His statistical analysis documents the growth since 1870 of what he labels "the social state" (p. 474 and passim), one that plays a "central role in economic and social life," not just war and security. But this is a description not an analysis of the role of government; we gain but hints of possible reasons for the expansions and contractions in its interventions in social and economic life. What we need is an argument about the relationship between civil society and state. We know that high inequality in wealth translates somewhat directly—but not perfectly—into high inequality in power. Piketty is certainly not making the claim of Marx and Engels in *The Communist Manifesto* that, "The executive of the modern state is but a committee for managing the common affairs of the whole bourgeoisie" Yet, how the wealthy operate and under what circumstances the non-wealthy have voice and influence must be part of an account that offers reasonable prescriptions for creating greater equality. This is a domain in which recent research on American politics and political history excels. See, for example: Larry Bartels, Martin Gilens, Louis Hyman, Elisabeth Clemens and Doug Guthrie, Jacob Hacker and Paul Pierson, Ira Katznelson and Monica Prasad.

Ultimately, what we need is an appropriate theory of the modern state, its forms of government, and the role of democratic institutions where they exist. It is not incumbent upon Piketty to offer this kind of theory, but his agenda raises a call for those of us who can to step in and step up. And many have. To name but a few who have taken on the grand task of helping to develop better theories of the state and of government: Francis Fukuyama, Peter Evans, Robert Bates, Bo Rothstein, and Barry Weingast.

Organized interests

To advance a program of reducing inequality and inequity in modern capitalist societies and of improving the quality of life and work depends on a fuller understanding of the actors in civil society. Piketty's emphasis is on governmental and economic actors to the extent there is an emphasis on actors at all.

Actually, his book is more of a structural account than one in which we have a good sense of the key actors and their strategic possibilities. So, the first move in producing a better political analysis is to identify the players, their potential coalitions, and their range of actions under different conditions. This means going beyond the wealthy and the government to specify the key sets of players within those groupings as well as outside them. The second move is to bring in civil society more fully. Boix, Acemoglu and Robinson, and North, Wallis, and Weingast attempted to do that in their accounts of the rise of democracy, but the Piketty problem is a different one, more similar to that of Piven and Cloward in understanding American welfare programs. Who are the organized interests who can engage in effective political influence and when can they do so? What role do voters play? Labor unions were mentioned but once or twice in passing in Piketty's book and political parties hardly at all; voting received a brief notice. Yet, the literature in political science and political sociology on these subjects is huge and instructive. Of special interest to Piketty should be the numerous works on relatively contemporary tax policy in developed economies (e.g., Steinmo; Daunton; Lieberman; Mares; Bergman; Martin et al.; Delalande; Martin).

Beliefs

The third building block is also crucial. Culture and ideology both contribute to the roles government can play in an economy and to the ways members of society change their demands and outlook. This Piketty recognizes. But underlying culture and ideology are beliefs what the world is like and what any individual or set of people can do about that world. Although Piketty acknowledges that the current state of affairs has attained a legitimacy that he is challenging with his work, the mechanisms of legitimizing demand greater attention. We know, for example, that effective tax collection depends on confidence that the government is able to ensure that, first, taxes go to the promised expenditures (without too much corruption en route or distortion at the end) and, second, others pay their taxes. But the belief in the fairness and the reliability in the tax system these conditions imply only occur where there is a bureaucracy capable of identifying who can pay what and able to enforce the rules. Only then do we get what I've elsewhere called "quasi-voluntary compliance": coercion is a backdrop, yes, but people will willingly contribute because they believe in the purposes of taxes.

But what makes citizens believe or honor the ends taxes are meant to serve? The non-economic literature (Hochschild; Ferejohn; Scholz and Pinney; Levi and Sacks; Levi et al.; Dickson complements that from the economists. As John Ahlquist and I argued in a recent book, such beliefs are an effect of the rules and processes embodied in organizations, governments, and groups. When individuals believe that they are being treated fairly, when they are given credible information about the way the world works, and when their socialization and opportunities enable them act on ethical commitments, they are more likely to develop an "expanded community of fate," in which they see their fates entwined with others—often strangers—in a larger society. They are then more likely to make sacrifices in taxes and to overcome a narrow view of self-interest in service of a larger societal good.

To claim that Piketty has failed to provide a sufficient political analysis in *Capital in the Twenty-First Century* is not really a criticism of his extraordinary book and its ambitious agenda. Rather it is a call to the rest of the social science community to provide that additional arguments and evidence needed if we are to succeed in making our economies and polities more equitable and better adapted to serving the human needs of their entire populations.

Chris Bertram - Piketty, Rousseau and the Desire for Inequality

Thomas Piketty's *Capital in the 21st Century* tells us a great deal about the evolution of inequality in wealth and income over a long period and how that distribution is likely to evolve unless we intervene. What Piketty does not do is to tell us why inequality is bad or why people care about inequality, although we can glean some knowledge of his personal beliefs here and there. In what follows I draw on some aspects of Rousseauvian moral psychology to suggest that the reasons people care about inequality matter enormously and that because some people value inequality for its own sake, it will be harder (even harder than Piketty thinks) to steer our societies away from the whirlpool of inequality.

In the book, Piketty argues that, without significant political intervention, it is likely that wealth inequality will increase dramatically in the coming century and that a class of rentiers will come to dominate over those who earn their incomes from labour, just as previous classes of rentiers did before the twentieth century. His book tells of a U-shaped pattern in the evolution of inequality in the past hundred years, with high levels of inequality being reduced but then bouncing back. Striking levels of economic growth coupled with the destruction by war and revolution of the wealth that formed the background to previous inequality, led to societies that were an unprecedented combination of egalitarianism and meritocracy, where those who worked hard could do well for themselves and where the domination over the living by wealth inherited from ancestors had become greatly diminished.

One of the things Piketty's work does is to provide an important historical contextualization of the work of John Rawls, showing that the type of society Rawls took to be the new normal, was not. It is striking how far Rawls's picture of a functioning scheme of co-operation reflected and normalised a merely historically contingent state of affairs. Rawls's ideal of a well-ordered national society, with its basic structure organizing citizens into functional roles to the end of implementing his two principles of justice can be seen as a cleaned-up and morally improved counterpart to the Keynesian national economies and welfare states that were typical of the developed states in mid-century. Citizens, their basic liberties guaranteed, brought their natural talents and acquired skills to market, and the rewards attached to the various position in economy and society were structured so that income inequalities worked to serve the goal of efficiency, to provide incentives, and thereby to ensure an income distribution that met the criterion of the difference principle and worked to the greatest benefit of the least advantaged. Though the difference principle officially covered all those social primary goods not distributed by lexically prior principles, it is clear that income from work was the main thing up for grabs.

Piketty's claim, then, is that all this is changing. We are moving from a high growth society to a low growth one, and income from the ownership of capital is coming to dominate income from labour as material inequality also grows. Moreover, there's a vicious cycle at work: low growth both fosters inequality but also the inequality we are getting is a barrier to growth. The amount of income available to those who work hard or innovate is diminishing, the amount available to those who are actually or practically rentiers is increasing. With the passing of the mid-twentieth century norm, the tradeoff that the difference principle standardly invoked, that we should tolerate some inequality to provide the incentives that would improve everyone's non-comparative good – how well people do in terms of wealth and income independently of how well others do – has largely been replaced. Now the pursuit of that good does not require permitting inequality so much as its active suppression, because it has gone beyond the point where it is necessary for growth and reached a degree where it suppresses growth, to the great detriment of those who have least.

As I mentioned at the beginning, Piketty himself does not have that much to say about why inequality is bad, or why people care about it. In the main, he simply documents the facts. In many respects this abstinence from moral philosophy is a strength. After all, there are many different reasons people care about inequality or believe that it is bad or unjust. If "inequality is bad or unjust" is within an "overlapping consensus", then we can rely on that shared belief in further theorizing and argument without settling the question of why it is bad or unjust. People who believe that inequality is intrinsically wrong or unjust can then make common cause with those who think it is bad for instrumental reasons, often alongside those whose real opposition is to other ills, such as widespread poverty.

However, we can discern some of Piketty's own normative commitments in his text, and these constitute something of a thin and conditional opposition to inequality even if – for all we know – they may not exhaust the reasons he believes inequality is bad or wrong. Two reasons stand out (perhaps more in later elaborations than in the book). The first is that whilst he believes that some inequality may be good for growth, he thinks that too much inequality can stifle it. The second is that he believes that when inequalities are too great, democracy becomes unsustainable. Both of these reasons are compatible with a broadly egalitarian liberalism and with modern republicanism, and Piketty references both the work of John Rawls and the Declaration of the Rights of Man in support of his general position. Further, it seems reasonably clear that

Piketty also endorses the Rawlsian view that inequalities within a state matter more than global inequalities do and for different reasons: the state has a duty to ensure that citizens enjoy equality of status with one another and this would be undermined by too much inequality of wealth and income. Globally there is no state with such a duty, nor citizens standing in a political relationship with one another. So the critique of global inequality must proceed on a different basis, and it is not central to Piketty's concerns.

As well as abstaining from moral commentary, Piketty also says little about the social and psychological reasons people care about inequality, but he says more than nothing. For example, he writes of the reasons given for paying some French administrators very high salaries, explaining that this was thought necessary because otherwise they would lack the social status necessary to deal on equal terms with wealthy elites. But most of the time, when Piketty is considering these questions at all, his focus is on the second set of issues, and here he is a solid materialist and economist: what matters it that people have the material resources necessary to lead good lives and inequality is a good thing if it provides (the worst off with) more of those things, and a bad thing if it does not. His concern here is mainly with people's non-comparative good. Some inequality has the effect of promoting that good, because it fosters growth, but too much inequality chokes it off and is therefore bad. (I put to one side here the fact that, because of competitive bidding for scare resources, inequality can affect people's non-comparative good directly, because the can outbid or be outbid by others for nice houses and the like.)

As economists tend to focus on people's non-comparative good, they also tend to neglect an important dimension of what people care about, having to do with pride, shame, recognition and the reactive attitudes. People don't just care about what they are objectively able to do with the resources they have, they also care about their standing, their reputation and its acknowledgement by others. This is an old distinction and it is central to Rousseau's philosophical anthropology as found, in his *Discourse on the Origins and Foundations of Inequality among Men.* According to Rousseau, people have two kinds of self-interested drive. On the one hand there is *amour de soi même*, an interest in non-comparative good, in being well fed, clothed, sheltered and healthy. On the other there is *amour propre*, a drive to secure recognition in the eyes of others as being of value which can turn into feelings of resentment and humiliation when it is not satisfied. My contention here is that something like Rousseau's distinction is necessary to understand the situation we are now in, and why it is going to be so hard for us to get out of it. *Amour propre* explains, as Frederick Neuhouser puts it,

> how humans can be led to seek out inequalities for their own sake, as public demonstrations of the superior standing they are out to achieve. The range of human phenomena that depend on such an impulse to inequality is extensive and familiar: the endless pursuit of wealth, ostentatious consumption, the relentless drive to compete and outdo … all are manifestations of the "fervor," inspired by *amour propre*, "to raise one's relative fortune, [not] out of genuine need [but] in order to place oneself above others" (OC III, 175) [1]

The coexistence of these two drives naturally raises the interesting question of what people want when they are in conflict. To put it crudely, would people prefer to be better off in their objective standard of living, or would they prefer that they be relatively better off than others? That's an empirical question and one to which I don't have an answer that's supported by evidence, but

[1] Frederick Neuhouser, *Rousseau's Critique of Inequality* (Cambridge: Cambridge University Press, 2014) p. 79.

some reasonable speculation is possible. People who are poor, who lack the basic amenities in life and who have to work very long hours just to make ends meet will, no doubt, have some concerns about their relative standing. But the urgency of their material needs will be such that an improvement in those conditions will be what they care about most. Being adequately fed, having decent sanitation and then access to labour-saving devices like washing machines is going to loom large in their priorities.

By contrast, someone who is extremely wealthy already, whose every imaginable material need is met, who can afford to spend money on private jets and Hermes Birkin bags, is going to be more concerned with relativities and with securing the kind of respect and recognition that such a person believes they are due from those with less. They will also often value relations with ordinary people which have the quality of deference, of cowed compliance, of those other people "knowing their place" and, where visible at all, acting as instruments of the wealthy person's will. To the one percenter, the subjection of others matters more than the further satisfaction of material need; to the person at the bottom, the satisfaction of need requires their own subjection because they have to accept that subjection in order to earn money to satisfy their material needs.

Notice how this picture inverts one of the standard tropes of the right-wing commentariat. According to endless pundits, it is the egalitarian left, obsessed with a "politics of envy", who irrationally focus on the distribution of wealth and income at the expense of what really matters, making people's lives better. But here we see that a focus on inequality, indeed a lust for inequality, is characteristic of the wealthy who value inequality for its own sake and who rejoice in the subordination of their fellows.

Since the crisis of 2008 there has been a continuous argument between proponents of austerity and those economists, influenced by Keynes, such as Paul

Krugman and Simon Wren-Lewis who have argued that austerity and cuts are unnecessary and that a plausible expansionary recovery is possible. Pundits and politicians of a more conservative bent have pushed the line that structural changes in the economy are needed, involving more flexibility from the workforce, that public services should be "streamlined" and scaled back and that welfare programmes should be cut to provide people with incentives to get back into work, and so forth. Suppose, as seems plausible to me, that the Krugmans, Wren-Lewises, and company are broadly right. If they are then there's a choice available between an "economically rational" policy with higher rates of growth and lower inequality , on the one hand, and an economically inferior policy with lower growth rates and higher inequality, on the other. In the second scenario we find the poorest members of society in an increasingly subordinated position with their best option often being precarious work on zero-hours contracts. On the "economically rational" view of the world the latter choice just looks crazy. After all, given compounding, over the long term higher growth rates make everybody better off. The poor would be richer, sure, but so would those at the very top.

But if, as I suggest above, people care not just about doing better with respect to their non-comparative good, but are also in the grip of powerful drives that can lead them to favour inequality, a different picture emerges. If the wealthiest members of society are strongly motivated to pursue and enforce inequality as a means of asserting their own dominance over others then, since they already have the material means at their disposal to satisfy all their consumption desires, they will (or enough of them will) favour policies that enhance the subordination of the least advantaged and make those people disposed to act according to the bidding of the wealthy. What Krugman, Wren-Lewis and others therefore see as an irrational policy preference becomes a rational one, given the things those in the elite most care about.

Where does this leave democracy? Piketty fears that given rising levels of wealth inequality, democracy is doomed. People will not tolerate high levels of inequality forever, and repressing their resistance to an unequal social order will eventually require dispensing with democratic forms. I'm not so sure. A highly unequal society in wealth and income is certainly incompatible with a society of equal citizens, standing in relations of equal respect to one another and satisfying their *amour propre*, their craving for recognition though a sense of shared citizenship. (This benign outcome roughly corresponds to the Rawlsian ideal of a well-ordered society where the social bases of self-respect are in place.) But the outward form of democracy, its procedures, are surely compatible with great inequality, just so long as the wealthy can construct a large enough electoral coalition to win or can ensure that the median voter is the kind of "aspirational" person who identifies with the one per cent, even though they are not of it. In an unequal society such people are very common. They may be very poor compared to the super-rich, but they have just enough to take pride in their status as members of "hard working families" and to hope for the lucky break that will elevate them. At the same time they can look down with contempt on the welfare claimant and the "illegal" immigrant, nurturing their own *amour propre* by taking satisfaction in what they are not. Here we have, in another guise, the phenomenon of the "poor white" who looks down on poorer blacks and is thereby impelled to sustain a hierarchical social order. Procedural democracy limping on against a background of inequality, disdain and humiliaton is not an attractive prospect, but it is already a big part of our present and may be the whole of our future unless egalitarian politics can be revived. [2]

[2]Many thanks to Martin O'Neill for comments.

Ann Cudd - A Critique of Piketty on the Normative Force of Wealth Inequality

Thomas Piketty's *Capital in the Twenty-First Century* is an important and valuable contribution to political economy, both empirically and philosophically. Piketty grounds his theory in vast empirical data,rather than settling for elegant mathematical models. He courageously embraces the fact that economic theory is inevitably value laden, and proposes a theory of the historical dynamics of wealth accumulation in order to offer an updated moral critique of capitalism. Grounding his prediction in the historical data and profoundly simple mathematics, Piketty projects that economic inequality is likely to increase and to favor those who own inherited capital over time. He advances the normative judgment that rising inequality is unjust and must be contained. Although Piketty raises important concerns about the possibility of growing wealth inequality, he fails to normatively ground or argue for his presupposition that this inequality is unjust. Since relative poverty can coincide with high levels of objective or subjective well-being, this presupposition is brought into question. However, there are causes of inequality (including wealth inequality) that clearly can be shown to be unjust. By considering other forms and causes of inequality and oppression, we can distinguish between those forms of wealth inequality that are unjust and those that are normatively benign. In this way Piketty's concerns about growing wealth inequality from inheritance can be partly justified, though of course not empirically verified. Piketty's argument for the injustice of growing economic inequality has two parts. The first part is an empirical, economic argument for the claim that returns from inherited wealth will far outstrip income. This argument can be summarized as follows. Let r be the rate of return on capital, and g be the growth rate of the annual flow of national income.

1. If $r>g$, then (wealth) inequality will grow over time.
2. Individuals who own a greater amount of capital earn a larger r.
3. Growth, g, is likely to be slower in future.
4. If r is great enough and g is low enough, then there will be ever more capital from older, inherited wealth, than from wealth saved from income.
5. Hence, (wealth) inequality will increase, and inherited wealth will make up the greatest amount of capital.

A few of these premises bear some explanation. The second premise is an empirical regularity that can be easily illustrated, as Piketty does by examining university endowments of varying sizes and showing that their real rates of return on the endowment vary directly with size.(p.448) The explanation he gives is that there are returns to scale for financial advisors, and the wealthiest can afford the kind of investment expertise that allow their endowments to outperform the average rate of return on capital. In essence, greater wealth generates even greater wealth. Premise 3 is accepted widely, though not universally, and not until an economy has achieved a modern level of development, like economies in Europe and North America. Premise 4 follows from Piketty's Second Fundamental Law of Capitalism: $\beta=s/g$, where β is the capital/income ratio, s is the savings rate, and g is the growth rate. This law implies that 'a country that saves a lot and grows slowly will over the long run accumulate an enormous stock of capital (relative to its income).' The conclusion is that 'in a quasi-stagnant society, wealth accumulated in the past will inevitably acquire disproportionate importance.' (p166)

Are these premises true, and is this a sound argument? I will not question premises 1, 2, or 3, which are largely empirical, economic premises, although others have done so. I will note that premise 4 depends in part on Piketty's contested way of evaluating the value of housing, which accounts for a great deal of the capital accumulation. Furthermore, Piketty dismisses human capital as a form of capital, even though human capital can create great wealth in a single lifetime, as Bill Gates's example would attest. The question of how to understand the role of human capital in the dynamics and morality of inequality would be a great topic for another blog post, but I won't pursue it here.

My main concern is with Piketty's normative argument, which is naturally less fully spelled out, but we can reconstruct it as follows:

1. Any inequality that is not justified is unjust.
2. Economic inequality is unjustified: it either comes from a fraudulent claim about merit or from inheritance.
3. Therefore, economic inequality is unjust.

Piketty assumes from the beginning what can be called 'the equality presumption,' that all inequalities are presumed unjust unless they are justified by appeal to some grounding ethical norm, or premise 6. The epigraph of the book, taken from the *Declaration of the Rights of Man and Citizen*, which reads: 'Social distinctions can be based only on common utility,' suggests that Piketty holds this view. However, the equality presumption is false; it is a fallacy akin to the principle of insufficient reason, which assumes equiprobability of events where there is no reason to assign another probability. But there is also no reason to assign equal probability rather than any other, and thus rationality cannot demand that. By the same token, morality cannot demand equal shares of a good (or bad) in the absence of a reason for it. I take this to be a point of logic, not morality. But the point can also be illustrated with a homey example. I have two different dinner parties, at one party I invite one group and the other party I invite a different group. Suppose the number of people I invite to each party is unequal. It is an inequality with no justification and yet licenses no moral approbation. In this case, to claim that I ought to have equal numbers of people at my dinner party would require justification.

As a result of the equality presumption, Piketty tends to conflate relative with absolute poverty. That is, he tends to talk about 'the poor' when he means the relatively poor, and to assume that relative poverty is an unjust condition. Speaking about Europe he writes, 'The poorer half of the population are as poor today as they were in the past, barely 5% of total wealth in 2010, just as in 1910.' (p. 261) But surely this contemporary poverty is only the relative kind; the standard of living of the two time periods is wildly different by any standard. While absolute poverty is clearly an unjust condition when others have more than enough to live on, relative poverty is not unless one embraces the equality presumption. Without assuming premise 7, relative poverty is not always unjust. Thus, we need criteria for distinguishing just from unjust inequalities.

To show that inequality is unjust, it must be shown that it is caused by an injustice or that it leads to one. Oppression is a basic form of injustice and it can cause wealth inequality (as well as political and social inequality). Oppression causes stigma and shame in the oppressed. Wealth inequality can mark persons by denying them certain opportunities or goods when others can have them. Thus, the stigma of oppression is transmitted by the denial of access created by relative poverty. Such inequalities, which transmit oppression, are therefore unjust.

Piketty fails to invoke oppression as a cause or type of injustice underlying inequality even when it would have been useful or simply sensitive to do so. For example he writes ‘inequality reached its lowest ebb in the United States between 1950 and 1980,’ but this is surely not the case for women, who were denied entry into many universities and occupations during much of this time, and who lacked many other freedoms, which they are only now achieving. He does add shortly after that passage “at least for those US citizens whose skin was white,” indicating that he recognizes the interaction between racial oppression and wealth inequality. But this is one of the only places where he discusses race, surely a crucial vector of oppression and cause of wealth inequality.

Later in the book, in the context of discussing the situation of the generation born in the period 1910–20 he writes: Talking about those born 1910–20, ‘for the first time in history, no doubt, one could live better by obtaining a job in the top centile rather than an inheritance in the top centile: study, work, and talent paid better than inheritance.’ (p. 408) This passage is androcentric. Women of this generation - over half of the people in that generation – would be neither gaining such work nor inheriting much. They would have been prevented by their sex – an immutable fact marking them for life – from applying for or even aspiring to such study or work regardless of their talents. Not having a lot of capital is one thing and does create wealth inequality and relative poverty with the rich, but being prevented from entering occupations due to one’s race or gender is an entirely different matter, one that is not a matter of relative good or bad, but absolutely and unequivocally an injustice. But to the point of this discussion: the case of oppression shows directly why inequalities that stem from them are wrong without having to infer indirectly that an inequality that cannot be justified must be wrong.

Piketty is most concerned about the inequalities created by inherited wealth. But if the equality presumption is denied, then an argument is needed to show that inequality from inherited wealth is unjust. Inherited wealth created inequality is unjust if it harms others. To the degree that there is a zero sum aspect of wealth, as with any form of wealth inequality, inheritance that creates inequality harms others. It seems that Piketty treats economic inequality stemming from return on capital or income as a zero sum sort of situation, but that is clearly not true. Investment of capital creates improvements in standard of living for all. Furthermore, there is some social good created by the ability to give wealth to others. But as with any cause of wealth inequality, the result is that the wealthy can outbid the relatively poor for goods that ought to be made available to all, such as education and healthcare, at least to some degree. This merely shows that there needs to be social provision of a floor level of provision of such goods, and not that inherited wealth is a problem per se.

When wealth inequalities stem from unjust inheritances, such as inheritance of wealth created from slavery or from unjust takings in the Holocaust, these inequalities are clearly unjust. Piketty recognizes that inheritance can transmit unjust inequalities from the past. He writes:

> The inequality $r>g$ in one sense implies that the past tends to devour the future: wealth originating in the past automatically grows more rapidly, even without labor, than wealth stemming from work, which can be saved. Almost inevitably, *this tends to give lasting, disproportionate importance to inequalities created in the past, and therefore to inheritance.* (p.378, emphasis mine)

However, he seems to be implying that all wealth inequalities that are transmitted by inheritance are unjust because they are transmitting inequalities from the past. Can this conclusion supported without the equality presumption?

Inherited inequality does bear some resemblance to oppression. Inherited wealth creates a club that one can only be born into, an immutable social fact that marks the wealthy aristocracy as privileged and the relatively poor or those who have made their wealth through income as less worthy. In this way inherited wealth creates a privileged group like other forms of oppression. It is crucial to note, however, that if we do not make the equality presumption, it is not the inequality itself that is oppressive.

Income-related inequalities cannot be said to transmit injustice in the way that inherited ones do. To show that income inequalities are unjust, they also have to be shown to derive from injustice or to lead to injustice. Piketty argues that top managers today are paid unjustifiably large salaries because it is too difficult to assess the marginal productivity, and in the absence of any information they are able to manipulate their own and each other's wages. A market failure is not an injustice, though it is a justification of government regulation. A significant cause of income inequality is the differences in human capital developed through education. Piketty notes that the educational systems in Europe and especially the US tend to prevent rather than promote social mobility, and instead transmit privilege. 'Parents' income has become an almost perfect predictor of university access.' (p.485) Piketty's explanation seems to be that it is because wealthy parents buy places for their children in universities, but I think this overestimates the corruption in university admissions and it underestimates the degree of stratification of the developed academic abilities of college age students. Wealthier families are better able to invest in developing children's abilities and talents to prepare them for college, and have better schools in their neighborhoods. Especially elite universities in the US compete very hard to find and attract low income and minority students, but the competition is stiff for qualified students who will not need remediation in order to succeed.

One of Piketty's most interesting points concerns the changing structure of inequality. His research reveals the emergence of what he calls a patrimonial middle class. In the 19th century the top 10% most wealthy owned 90% of capital, the middle 40% owned 5% and the bottom 50% owned 5%. In the US today, top 10% own 25% and the next 40% own 25% of capital, while in Europe the top 10% own 60% and the next 40% own 35% of capital. 'The emergence of a 'patrimonial middle class' owning between a quarter and a third of national wealth rather than a tenth or a twentieth (scarcely more than the poorest half of society) represents a major social transformation.' (p.373) The existence of this large relatively wealthy middle class makes the experience of being in the propertyless class qualitatively different, in a way that needs to be investigated. The stigmatizing of an out-group by the existence of the relatively wealthy is a psychological harm, and arguably an injustice engendered. Is this stigma an inevitable outcome of wealth inequality? What level and what structure of inequality creates this? What other social facts make a difference to the development of stigma based on wealth inequality? These are important questions for social psychology to consider.

A final point concerns the role Piketty assigns economics as a normative discipline. Piketty claims that 'economics is a subdiscipline of the social sciences, alongside history, sociology, anthropology, and political science.' (p.573) While he is right to point out the essential interdisciplinarity of social science, he omits what I think is a very important piece of the overall normative picture in omitting social psychology. I have argued that to show that wealth inequality is unjust, and when it is unjust, requires social psychology to weigh in about stigma and the structure of inequality in a society (or globally). Furthermore, Piketty claims a distinct normativity to 'political economy,' the expression he prefers to 'economic science.' He writes that the 'thing that sets economics apart from the other social sciences: its political, normative, and moral purpose.' I agree with this basic point, but disagree with Piketty's overall taxonomy of the social sciences and their relation to normative analysis.

Miriam Ronzoni - Where are the Power Relations in Piketty's Capital?

I would like to raise two related questions to Thomas Piketty. The first concerns his repeatedly declared conviction that economic theory cannot explain trends in inequality by itself, that policies and institutions are equally important, and that economists must therefore put forward their hypotheses and explanations with this interdependence in mind. Given what I have understood Piketty's main thesis to be, I wonder up to which point he is actually committed to that claim. The second concerns Part Four of *Capital*, where Piketty sketches a proposal for how to regulate capital in the 21st century. In a nutshell, my concern about Piketty's proposal is that there seems to be a friction between the diagnosis offered in the rest of the book (which seems to draw a rather bleak picture of the power of capital in the early 21st century) and the suggested cure (which seems to rely on the optimistic hope that, once well-minded citizens will have recognized the problem, the only hurdle will be to find the right policy to fix it). To put it provocatively, both my questions are inspired by the suspicion that Piketty seems to hold on to a social-democratic optimism of sorts at all costs, whereas his findings seem to push him in a different direction. With the label 'social-democratic optimism' I mean two things: on the one hand, optimism about the role of policies and institutions in taming capital on the one hand; on the other, the persuasion that what politics is fundamentally about is making citizens understand what the problems are in a well-minded, reasoned dialogue, and then they will be persuaded to do the right thing.

Let me unpack the first question first. To the best of my understanding, whereas the book makes repeated gestures towards the idea that policies and institutions play a central role in explaining economic trends, and that economists should be extremely cautious to draw conclusions on the basis of their own discipline alone, there is very little politics in *Capital.* The book argues that our delusion, in the decades following WWII, that democracies could, after all, tame capitalism and make it subservient to public ends was largely just that - a temporary delusion. Piketty's thesis, especially in chapters 3 to 6, is that the sheer destruction of wealth caused by WWII is the central reason why inequality seemed to be back under control for a while in the Bretton Woods era. It is that destruction which temporarily brought long term trends (the 'fundamental laws of capitalism,' and the capital/income ratio and $r>g$ in particular) out of line. Although Piketty repeatedly claims that policies and institutions also played a major role, it is rather unclear, from his analysis, what that role was. The rise of the welfare state and its regulatory policies - in short, democracy's control over capital - play only a moderate role in his historical analysis. This explains his claim that, once the effect of WWII started to wane, capital (though not its share of the pie, or at least not yet) slowly returned to its 19th century shape.

Indeed, one of Piketty's most insightful ideas, to a lay reader like me, is his point that the internal structure of capital (the role played by land or by financial capital, for instance) then and now are very different, yet the capital/income ratio remains surprisingly constant across history with the only exception of the *Trente Glorieuses.* Most of the book seems to imply that, bar extreme shocks, what he calls 'the fundamental laws of capitalism' take the upper hand - and such laws lead to the rise of a patrimonial and largely unaccountable aristocracy. In short, the idea that the problem is capitalism period (not deregulated capitalism, not globalized capitalism, not austerity-based capitalism) seems to lurk in the background. Yet such claims are never explicitly made. General lessons are not absent. Piketty argues, for instance, that 'progress toward economic and technological rationality need not imply progress towards democratic and meritocratic rationality' (p. 234); or that 'there is a set of forces of divergence associated with the process of accumulation and concentration of wealth when growth is weak and the return on capital is high' (p. 23). Yet they are formulated with extreme caution.

My hunch, from reading that part of the book, is that Piketty's thesis actually suggests (and, to be clear, it is a suggestion I find quite persuasive) that the policies and regulations of the post-war era were, if at all, the effect rather the cause - i.e., they were made possible by the fact that the power relationship between capital and labour had changed, but did not cause that shift in power relationships themselves. As such, they were perhaps instrumental in further slowing down the recovery of capital, not in determining it. And indeed, once the recovery of capital reached a certain level, a change in policy trends followed suit. If this is correct, such a diagnosis has a sobering effect: it means both that social-democratic politics by itself is by far not enough to contain inequality, and that it is itself only possible when a window of opportunity opens up, and it is a window of opportunity determined by extraordinary events (and events we probably would not want to see repeated any time soon). So, isn't Piketty telling us that the long-term trends set by the 'fundamental laws of capitalism,' and not regulatory policies, are where the action is, after all? Now, my reading may very well be wrong; but if so, I would like to know where exactly it is wrong.

Let me now turn to my second question. It will quickly become evident, I hope, that it is related to the first. In Part Four of *Capital*, Piketty asks: if the dynamics of inequality are those which I have identified so far - namely, if 'forces of divergence' are particularly obstinate under capitalism, bar exceptional shocks - how, if at all, can we structure policy to oppose or at least mitigate such tendencies? Piketty's answer, after the review of several alternatives, is cautiously formulated but clear: a highly progressive, global tax on capital. This, he adds, might be a utopian project in the short run (and perhaps in the long run, too), but it nevertheless constitutes the regulative blueprint we should adopt to reach any more realistic, midterm goals. Now, the question I would like to raise is very simple: given the picture that Piketty himself has drawn throughout the book, is the proposal of the optimal policy to 'fix' the problem an appropriate way to end it? My suspicion is that it might suggest that the kind of problem identified by Piketty is one which, once widely recognized and acknowledged, will almost automatically generate the political will to fix it. Inverting the trend is just a matter of good will - this is what I mean by 'social-democratic optimism.'

I find this twist somewhat puzzling, and I am not alone. Other readers, whether generally more critical like Thomas Palley or overall very appreciative like Paul Krugman, have also pointed out a very basic point: if patrimonial capitalism is back, then surely its determination and capacity to influence political power is, too? And if this is the case, then surely the problem is not to identify a good policy which everybody will agree to once they have understood Piketty's diagnosis to be correct, but to think about how to harvest the sufficient counter-power to put any redistributive policy back on the agenda to begin with. In other words, we seem to need less policy and more politics: the emphasis should be more on political action and political processes than on which cure to put forward once the political power to put forward a cure at all has been achieved. Both the rise of economic elites and their capacity to use globalization in their favor (by threatening capital flight, to mention but the most obvious example) have undermined the capacity of other sectors of society to participate in democratic politics, whether through parties or unions so much so that some observers today argue that we might very well live in de facto oligarchies, at least in some jurisdictions.

If this is the case, the point seems to be how to reclaim some control over our democracies - how to generate the political conditions under which the right policies and institutions could be back on the agenda to begin with. To make an example, and as some have already argued, the final part of Capital would have been more in tune with the rest of the book had it concentrated on the prospects of labour as a political actor rather than on designing the optimal, if utopian, policy. I am not thereby implying that Piketty should have the solution to these problems - this is not his job and, indeed, it is very unclear whose job exactly it is. But I am puzzled by the absence of a more straightforward acknowledgment of the issue. By jumping to an exercise in admittedly utopian policy design, the book ends with an optimistic note that is in contrast with the rest of the book, for it suggests a faith in the power of well-meaning democratic politics which, if my reading of the books main these are correct, strikes me as unwarranted. I am not known for quoting Slavoj Žižek, but I must confess that I found the way he recently put this point particularly eloquent: 'If you imagine a world organization where the measure proposed by Piketty can effectively be enacted, then the problems are already solved. Then already you have a total political reorganization, you have a global power which effectively can control capital, we already won… The true problem is to create the conditions for his apparently modest measure to be actualized.'

In a way, I would have found the book more consistent had it contained no Part Four at all, and had it admitted that our main and probably daunting challenge today is to found out how to reach a place where something resembling the content of Part Four can be put on the table at all. Such an ending, if more pessimistic, strikes me as more in line with the findings of *Capital,* which are very radical indeed and somewhat at odds with social-democratic optimism. Again, I could be wrong - but if I am, I am very keen indeed to understand why we have reasons to be optimistic. I would like to end that my questions might strike readers as being somewhat provocative - if that is the case, the reason why they are is that I found the book extremely insightful and eye-opening, and I am tempted to say that its implications might well be more radical than its author wishes.

Post-Scriptum: Acknowledging that the problem is in creating the political conditions for a change in policy making might entail accepting fairly high levels of political conflict. Piketty might find this highly undesirable, and this could be a key to an alternative interpretation of his conclusions, according to which what prompts his emphasis on optimal policies is not social-democratic optimism but the awareness, and the will to communicate to those who have control over policy-making, that letting inequality unravel will inevitably generate massive social and political destabilization, and that everybody (the 1% included) has a strong interest in avoiding that. Part Four is therefore not the expression of optimism, but a recipe to avoid a disaster. Again, I would be extremely interested in reading what Piketty has to say about this.

Danielle Allen - Education and Inequality in the 21st Century

Early in *Capital*, Thomas Piketty writes:

> [H]istorical experience suggests that the principal mechanism for convergence [of incomes and wealth] at the international as well as the domestic level is the diffusion of knowledge. In other words, the poor catch up with the rich to the extent that they achieve the same level of technological know-how, skill, and education. (p. 71).

Yet when he turns to policy prescription in part IV of the book, his treatment of education is relatively brief and mainly forms a part of his discussion of the "modernization of the social state." By this he means that 'the tax and transfer systems that are the heart of the modern social state are in constant need of reform and modernization, because they have achieved a level of complexity that makes them difficult to understand and threatens to undermine their social and economic efficacy.' Given the emphasis Piketty places on education as a force for equality in the opening section of the book, the brevity of the final discussion disappoints. He might have said much more. In what follows, I will summarize Piketty's educational policy prescriptions, comment on the theoretical framework underlying them, and then point to what I take to be an even more important source of education's egalitarian effects.

Piketty's recommendations for educational policy are quite spare; they are also familiar: egalitarian minded reformers ought to work toward the broadest possible accessibility of educational institutions to the population; elite institutions, which currently serve mainly privileged youth from the highest income brackets, need to broaden the backgrounds from which they draw their students; states should increase investment in 'high-quality professional training and advanced educational opportunities and allow broader segments of the population to have access to them' (p. 307); and schools should be run efficiently.

In conditions of growth, the increasing accessibility of education serves to reduce income inequality, and eventually wealth, only if it shifts the distribution across the population of types of degrees. That is, the spread of education has little impact on inequality if everyone who once had a high school degree now earns a college degree, and all those who previously secured only an eighth grade level of education now attain the high school credential. Instead, one needs to shift those in lower educational bands into higher bands, without concomitant upward positional moves of those in the higher bands.

These policy proposals closely track those of Claudia Goldin and Larry Katz in *The Race between Education and Technology.* In their argument, rising income inequality in the U.S. can be explained to a significant degree by the wage premium on skill. As technological innovations emerge and generate a demand for new skills that are under-supplied, those in possession of the skills-in-demand will reap rewards in the form of higher income. In order for a society to see egalitarian income distributions, on their argument, education must race to maintain democratized skill provision that keeps up with the changing demands of an economy fueled by technological development.

As Piketty points out, the wage premium on skill can explain only a part of the growth in income inequality in the U.S. The growth at the highest end, in the incomes accruing to 'supermanagers,' in his vocabulary, reflects social norms that have coalesced around the acceptability of sky-high executive pay. In his argument, these social norms have coalesced as part of the growth of political ideology that endorses untrammeled meritocracy. Supercharged salaries are held up, rhetorically, as evidence of a supposedly fair and equally supercharged operation of talent.

The question, then, of how to temper income inequality on Piketty's argument has fundamentally to do with social norms, and the question of how those can be changed. Here is where he misses one of education's most egalitarian impacts. In an important 2006 paper, 'Why Does Democracy Need Education?' economists Edward L. Glaeser, Giacomo Ponzetto, and Andrei Shleifer identify a correlation between education and democracy that they argue has causal force, with education causing democracy. They point to a more fundamental relationship or, in their words, 'primitive connection,' between education and participation and test three hypotheses for why education might cause participation. Perhaps it does so through the provision of indoctrination; perhaps through the provision of interpersonal skills (through reading and writing and the provision of 'soft skills' as well); or perhaps through a general increase in the personal material benefits of participation? They rule out the first and third hypotheses and make the case that education causes participation because it makes people ready to participate. (Another brilliant moment where economists validate the obvious!)

And what flows from participation? Not always, but very often, democratic contestation. (The purpose of the qualification is to acknowledge, as Glaeser, Ponzetto, and Shleifer point out that the rise of European fascism also drew on the energies of students.) As scholars of the U.S. Civil Rights movement, like Charles Payne, and studies of activism by Cathy Cohen and Deva Woodley, have shown, political contestation can drive change in social norms. (For a superbly insightful essay on social norms, their bases, and the potential for changing them, see Deborah A. Prentice, 'The Psychology of Social Norms and the Promotion of Human Rights.’). This is where education’s true egalitarian potential comes into play. It supplies the basis for forms of participatory democracy that might contest the labor market rules that deliver insupportable forms of income inequality.

Piketty’s failure to make this point is surprising. In a 2014 paper, “The Rise and Fall of General Laws of Capitalism,” the economist Daron Acemoglu and political scientist Jim Robinson have pointed out that arguments like those of Katz and Goldin presume a stable framework of technology and political institutions. They put this point as a critique of Piketty, arguing that his account of a future where rates of return on capital will consistently outstrip growth fails because, in their view, it ignores politics. Thus they write:

> The quest for general laws of capitalism, or any economic system, is misguided because it is a-institutional. It ignores that it is the institutions and the political equilibrium of a society that determine how technology evolves, how markets function, and how the gains from various different economic arrangements are distributed. (The Rise and Fall of General Laws of Capitalism, p. 1).

As examples of the impact on popular participation on the economy, Acemoglu and Robinson highlight late 19th and early 20th century Populist and then Progressive mobilizations in the U.S. that led to reductions of corporate power, a turn of events that refuted one of Marx’s general laws, they argue.

But their argument is not fair to Piketty who does repeatedly underscore that policy frameworks, institutional choices, and social norms affect how income and wealth will be distributed. Thus, he writes (p.308): ‘In order to understand the dynamics of wage inequality, we must introduce other factors, such as the institutions and rules that govern the operation of the labor market in each society.' In other words, Piketty fully understands the importance of politics to his picture of the economy. The only trick he misses is to underscore the relationship between education and equality that rests on the link between education and preparation for participation.

The preparation of citizens, through education, for civic and political engagement supports the pursuit of political equality, but political equality, in turn, may well engender more egalitarian approaches to the economy. An education that prepares students for civic and political engagement brings into play the prospect of political contestation around issues of economic fairness. In other words, education can affect income inequality not merely by spreading technical skills and compressing the income distribution. It can even have an effect on income inequality by increasing a society's political competitiveness and thereby impacting "how technology evolves, how markets function, and how the gains from various different economic arrangements are distributed."

J.W. Mason - It's Bargaining Power All the Way Down

Imagine that you're a person who is obsessed with airplanes. Naturally you're excited when everyone starts talking about this big new book, *Aviation in the 21st Century.* You get your copy and start reading. Just as you'd hoped, there's a detailed discussion of the flight characteristics of a vast variety of plane types and a comprehensive record of different countries' commercial fleets, from the beginning of aviation until today, plus a few artfully chosen illustrations of classic early planes. But long stretches of the book are quite different. They are devoted to the general principle that, in an atmosphere, heavier objects fall faster than light ones, building up to the universal law that lighter-than-air objects will float. Finally, in the conclusion, you find some bleak reflections on the environmental consequences of air travel – hardly mentioned til now –

and a plea for the invention of some new technology that will allow fast air travel without the use of fossil fuels. How do you feel, when you set the book down? You would be grateful for the factual material - even if the good stuff is mostly relegated to the online appendices. You would be impressed by the rigorous logic with which the principle of buoyancy was developed, and admire the author's iconoclastic willingness to break with the orthodox view that all motion takes place in a vacuum. You probably share the author's hopes for some way of eliminating the carbon emissions from air travel. But you might also find yourself with the uneasy feeling that the whole is somehow less than the sum of its parts.

You're probably not into airplanes. But reading *Capital In the 21st Century,* you may have experienced a similar unease. You know the great social change the book is motivated by is the long run trajectory of income distribution - high in the 19th century, declining through much of the 20th century, and rising in recent decades. You understand that the central theoretical claim of the book is that "$r>g$" creates a secular tendency for income to concentrate. But it's hard to find an account of how the universal logic accounts for the concrete history. (It's striking, for instance, that the book does not contain a table or figure comparing r and g historically.) In contrast to the comprehensive account of the evolution of wealth shares in a dozen countries, the evidence linking this evolution to the supposed underlying dynamics is sparse and speculative.

The fundamental source of this disconnect is the two different senses in which Piketty uses the term "capital." In the historical material, it is the observable aggregate of property claims, measured in money. But in the theoretical passages, it is a hypothetical aggregate of physical means of production. As a result, the theory and the history don't really connect.

In treating capital as a money value when he measures it, and a physical quantity when he theorizes about it, Piketty follows the practice of most economists. I am far from the first one to point to problems with this approach. Heterodox critics who focus on this choice often invoke the Cambridge capital controversies, and suggest there is something logically inconsistent about the idea of a quantity of capital. In my opinion, these criticisms do not quite hit the mark. “K” and the formal models it is part of are tools for abstracting away from some aspects of observable reality in order to focus on others. Joan Robinson was certainly right that growth models of the kind used by Piketty cannot be derived from generic assumptions about production and exchange. But so what? The question to ask about a model is not whether it is logically derivable from first principles, but whether it gives a good description of the phenomena we are interested in. There is no reason in principle that a model of capital as a physical stock cannot capture important regularities in the behavior of capital as observable money wealth. It just happens that for for the central questions of *Capital in the 21st Century,* it does not.

Probably this is familiar to most people reading this, but let’s recap Piketty’s formal argument. He begins with two laws. The first decomposes the profit share into the rate of return on capital and the ratio of the capital stock to national income: $\alpha = r\ \beta$. α is the share of capital income in total income, r is the average return on capital, and β is $K\ /\ Y$, the capital stock (K) as a share of total income (Y). This “law” has been criticized as vacuous on the grounds that it is an accounting identity - an equation that is true by definition. Again, I think this is unfair. Yes, it is an accounting identity, but an accounting identity read in a particular way. It says that there is a given stock of capital, which produces a certain stream of income; this can then be compared to total national income to give the capital share. We could write the identity in other ways. The same identity could be read in other ways, for instance, $K = \alpha\ Y/r$.

Formally this is the same but it means something different. It means that a certain share of output is first claimed by a class of capital owners, and then their tradable claims on this income are assigned a value based on a discount factor r.

The loose articulation between Piketty's historical material and his formal analysis comes from his decision to interpret the identity in the first way and not in the second. Starting from a quantity of capital leaves no room for valuation effects or distributional conflict in explaining the wealth ratio W/Y. instead, Piketty is forced to explain the ratio by focusing on the increase in the capital stock attributable to saving (s) relative to the growth of income (g). The problem is, these variables don't do much empirical work in explaining the data. Almost all the historical action in the wealth share is in the changing value of existing wealth, not the pace at which new wealth is being accumulated.

Piketty's second law states that in the long run, the ratio of the capital stock to national income converges toward the ratio of the savings rate to the growth rate. This second law is the equilibrium condition of a "zeroth law" (Yanis Varoufakis' coinage), which says that the change in the capital stock from one period to the next is equal to the output from the previous period that is saved rather than consumed. (Minus depreciation of the existing capital, but Piketty somewhat idiosyncratically defines saving as net of depreciation, a choice that has been criticized.) This zeroth law is usually implicit, but it is critical to the question of whether we should treat capital as a physical stock. If a value is stable over time except for identifiable additions and subtractions, we can usefully treat it as a physical quantity, whether or not it "really" is one. If we assume that the evolution of the capital stock follows this zeroth law (i.e. that capital is cumulated savings) and also assume that savings and growth rates change slowly enough for the capital stock to fully adjust to their current values, then the capital output ratio will converge to the value given by Piketty's second law.[3] This apparatus - which is basically the growth theory of Harrod and Domar via Solow - is Piketty's preferred tool for analyzing changes in the capital share over time.

So the question is, do these laws describe the historical trajectory of the wealth ratio? The answer is pretty clearly no.

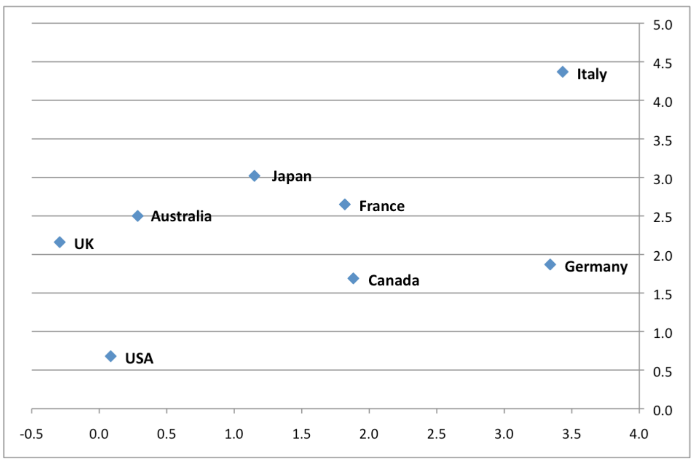
Piketty, I should be clear, poses this question clearly – not so much in the book itself, where the Harrod-Domar-Solow framework is mostly taken for granted, but in articles like this one (with Gabriel Zucman). There they ask: How much of the variation in alpha and beta – over time and between countries – can be explained in terms of cumulated savings and income growth rates – that is, by treating capital as a physical stock? Unfortunately, the answers are not very favorable. Piketty's critics on the left have not done ourselves any favors with our fondness for deductive proofs that any use of "K" is illegitimate. But it is true that, applied historically, this method can only explain that part of the variation in income and wealth distribution that corresponds to different rates of accumulation relative to output growth. And the problem is, most historical variation is not explained this way, but precisely by the features Piketty abstracts from - changes in the flow of output going to owners of existing capital claims, and changes in the valuation of future capital income.

There are many ways to see this. Here are a couple of examples, using data from his online data appendixes.[4] First, let's look at the change in the wealth

[3] I'm emphasizing the "zeroth law" here, but it's worth noting that the conventional practice of treating s and g as "slow" variables and β as "fast" is also open to question. If you look at the historical data, national savings and growth rates are much more variable than the capital-output ratio, and they don't appear to be stationary around any long-term average. So it seems a bit nonsensical to talk about the capital-output ratio as converging to a long-run equilibrium defined by a fixed s and g.

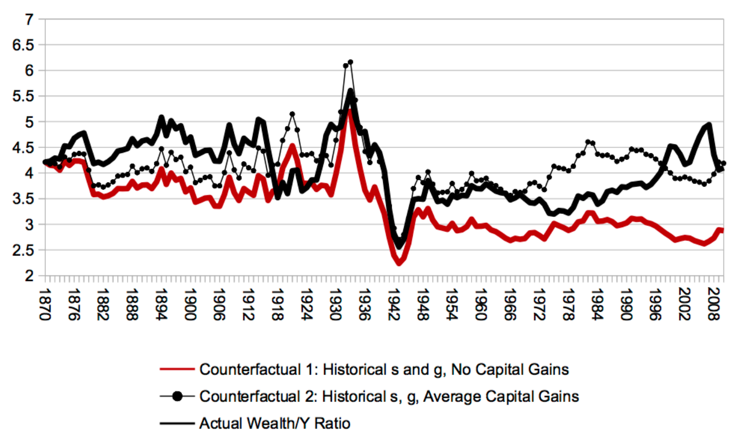
[4] Piketty's presentation of his data online is superb, both in content and organization. Even if the book were otherwise worthless - which is very far from the case - these appendixes would be a huge contribution.

ratio β in various countries since 1970. This rise in the value of capital relative to current output is one of the central phenomena Piketty wants to understand, and underlies his claims about the increasingly skewed distribution of personal income. The horizontal axis shows the change in the wealth ratio implied by observed savings and growth rates. This is the change in wealth ratios that can be explained by differential accumulation and growth. On the vertical axis is the actual change.



As you can see, there is not much of a relationship. It's true that slow-growing, high-saving Italy has the biggest increase in the wealth-income ratio, just as the capital-as-quantity approach would predict, and that fast-growing, low-saving United States has the smallest. But that's it. German savings have been nearly as high as Italian,and German income growth nearly as slow, yet the growth of the wealth ratio there is close to the bottom. In the UK, the behavior of savings and income growth implied that the wealth ratio should decline; instead it rose by over 200 percentage points. Cumulated savings and growth rates explain only about 20 percent of the variation in wealth ratio increases across countries; 80 percent is explained by changes in the value of existing assets. If we want to know why the capital share has increased in some countries so much more than others over the past 40 years, the Harrod-Domar-Solow approach is not much more helpful than the principle of buoyancy would be to analyze the flight performance of different aircraft.

Next let's look at the evolution of the US wealth ratio over time. The second figure shows the historical path of the US capital output ratio and two counterfactual paths. The counterfactuals are what we would see if wealth followed the "zeroth law." The first counterfactual simply shows the wealth ratio under the assumption of standard growth theory that the value of capital stock in one year is equal to the value in the previous year, less depreciation, plus saving. All of Piketty's formal analysis is based on the assumption that, on average, this is indeed how the capital stock behaves. The second counterfactual is based on capital gains fixed at their average for the full period, and again historical savings rates. (It also follows Piketty by treating quantity changes as saving, but this is not qualitatively important.)



What do we see? First, the cumulated-savings trajectories are quite different from the historical trajectory, even over the long run. As Piketty notes, the Harrod-Domar-Solow approach assumes that over the long run, the value of assets rises at the same rate as the price level in general. But in the US (as in other countries), this is not the case – over the full 140-year period, real average capital gains are 0.6% annually. This might seem small, but over a long period it has a decisive impact on the trajectory of the wealth ratio. As the figure shows, in the absence of these capital gains the US wealth ratio would follow a clear downward trend, from a bit over 4 times GDP in 1870 to a bit less than 3 times GDP today. In the US, in other words, the growth of the capital stock through net saving has consistently been slower than the growth of output. Under these conditions, the Harrod-Domar-Solow framework predicts a declining wealth ratio.

The capital-as-quantity framework also does not fit most of the medium-term variation in the wealth ratio. True, it does match the historically observed rise in the wealth ratio during the 1930s and the fall during World War II, which are driven by changes in the denominator (GDP) not the numerator. But it suggests that the only significant postwar recovery in the wealth ratio should have come in the 1970s, when in fact the wealth ratio reached its nadir in this period. And the more recent rise in the wealth ratio has come in a period when Piketty's framework would predict a sharp decline. During the decade before the Great Recession, savings were low but capital gains were high; in a Harrod-Domar-Solow, framework, that implies a decline in the value of wealth relative to output. The message of Piketty's data is clear: If "capital is back," it is entirely because of an increase in the value of existing assets, not, as the book suggests, because accumulation has been outpacing growth.[5]

So treating capital as a physical stock fails to capture either the long-run trajectory of capital-output ratios or the variation in wealth ratios across countries

[5] Another problem is that Piketty's narrative suggests that r, the rate of return on capital, is constant or increasing, while his data unambiguously show a long-term decline. As a result, the rise in the wealth ratio has not been accompanied by a rise in the capital share, at least not everywhere. In the UK and France, there is a clear downward trajectory from a capital share of 40 percent in the mid-19th century to around 25 percent today.

and between different periods. All of the developments Piketty describes in his historical material, is driven by the valuation changes that he abstracts away from in his formal analysis.

With a moment's reflection, this should not be surprising. After all, a significant fraction of the wealth stock is land, which is not produced. If land prices did not consistently rise faster than the general price level, then land would have long since declined to a trivial fraction of total wealth. The problem land poses for Piketty's story is emphasized by Matt Rognlie among others, whose critique of the book is in some ways parallel to the argument I'm making here.

If we can't make sense of the changes in the wealth ratio by thinking of the incremental accumulation physical stock of capital, how else can we think about it?

Let's go back to Piketty's First Law. As I suggested, there are different ways to interpret this accounting identity. We can think of it as Piketty and most other economists do, as saying that there is a stock of capital goods; these goods generate a certain amount of output, which is received as income by the owners of the capital goods; that stream of income can then be compared to the national income to find the share of capital owners. From this point of view, the stock of capital is the real sociological fact and the shares are secondary. Alternatively, instead of starting from an endowment of capital goods, we could start from the process of social production. The output of this process is then divided up according to various socially recognized claims, which we call wages, profits, taxes, and so on. Some claims are marketable; these claims will have a price. The price of profit-type claims on output is related to the flow of income assigned to them by r, now understood as the discount factor applied to an income stream rather than the income generated by an asset.

It's the same identity, the two stories are formally equivalent. The effort to turn this formal equivalence into a substantive identity - to reduce money values and distributional conflicts to the technical problem of allocation of scarce resources - have yielded two centuries' worth of tautological circumlocutions. But at the end of the day we are left with a choice of ways of looking at the same observable phenomena. In the orthodox perspective favored by Piketty, we ask "why is there more capital than there used to be?" and "what is the product of each unit of capital?" In the second perspective – which following Perry Mehrling we might call the money view – it's the distribution among rival claims that is the real sociological fact, and the value of these of claims as "capital" that is an after-the-fact calculation. From this point of view, the relevant questions are "how much of the output of the firm is appropriated through property claims?" and "what value is put on each dollar of property income?" In which case, we should expect to see higher wealth ratios not in times and places where cumulated savings have outpaced growth, but in times and places where the bargaining process has shifted in favor of holders of capital claims, and where financial markets place a higher value on ownership claims relative to current output.

What does this mean concretely? Piketty himself gives some good examples. There is a short but interesting section in the book on the abolition of slavery in the US. Here we have a drastic (though short-lived) reduction in the wealth ratio and capital share in the US. Clearly, this has nothing to do with any change in the pace of accumulation of physical capital. Rather, what happened was that a share in output that had taken the form of a tradable capital-type claim ceased to be recognized. Piketty presents this as a special case, an interesting excursion; he might have done better to treat it as a signpost to the main road. Slavery is only one possible system in which which authority over the production process, and a share of the surplus it generates, goes to the holders of particular kinds of property claims.

Another, perhaps more directly relevant case, is the case of Germany. Germany, by income one of the richest and most equal countries in Europe, has among the lowest and most unequal household wealth. In addition - and not unrelatedly - German corporations have unusually low stock market valuations. Among the major rich countries, Germany consistently has the lowest Tobin's q – shares of a company with given assets and liabilities are valued less in Germany than elsewhere. The first puzzle, that of low and highly skewed market wealth, is largely explained by low levels of homeownership in Germany. Compared with most other rich countries, middle-class Germans are much more likely to be renters. This does not mean that their housing is any lower quality or less secure than in other countries, but it does mean that the same physical house in Germany shows up as less market wealth.

The lower valuation of German corporations also reduces the apparent wealth of German households. And why are German firms valued less by the stock market? Piketty and Zucman offer a suggestive explanation:

> the higher Tobin's Q in Anglo-Saxon countries might be related to the fact that shareholders have more control over corporations than in Germany, France, and Japan. … Relatedly, the control rights valuation story may explain part of the rising trend in Tobin's Q in rich countries. … the "control right" or "stakeholder" view of the firm can in principle explain why the market value of corporations is particularly low in Germany (where worker representatives have voting rights in corporate boards). According to this "stakeholder" view of the firm, the market value of corporations can be interpreted

as the value for the owner…

In other words, one reason household wealth is low in Germany is because German households exercise more of their claims on the business sector as workers rather than as wealth owners. Again, this is treated by Piketty as a sideline to the main narrative. But given that almost all the rise in wealth ratios is explained by valuation changes, this sort of story about the strength of shareholder claims under different institutional arrangements probably has more to say about the actual evolution of the capital share than the whole apparatus of growth theory.

When I've made this argument to people, they've sometimes defended *Capital in the 21st Century* by saying that we should take its title seriously. Despite appearances, this is not fundamentally a book about the historical evolution of wealth and income in various countries, but about what we might expect to happen in the future. But it seems to me that our interpretation of the historical record is going to shape our judgements about future prospects. In Piketty's story, there seem to be two different kinds of forces at work. There are valuation changes and revisions of property rights, which operate episodically; these explain the mid-20th century declines in the wealth ratio and capital share. And there is the ongoing dynamics of accumulation, which operates all the time; this explains the convergence of the wealth ratio and capital share to high levels both in the 19th century and more recently. (Or explains the increase of the wealth ratio without limit, if you prefer that reading.)

When we split things up this way, it's natural to base our predictions for the future on the continuous process, rather than on the historically specific episodes - especially if those episodes all coincide with major wars. The continuous process, furthermore, implies a tight link between growth and the wealth share.

The same acts of saving and investment that allow society to increase its material production, also ensure that an increasing share of that production will be claimed in the form of capital income, even while the great majority of us continue to depend for our income on labor. So it's futile to try to change the distribution of income directly; all that can be hoped for is redistributive taxes carried out by the *deus ex machina* of a global state.

But when we realize that changes in the value of existing assets are central not just to the decline in wealth ratios in the mid-20th century, but to their whole evolution - including their rise in recent decades - then the mid-20th century decline no longer looks like a special case. It's bargaining power, it's politics, all the way down. The same kind of redistributive projects - the decommodification of basic services like healthcare, pensions, and education; the increased bargaining power of workers within the firm - that were responsible for the fall in the capital share in the mid 20th century were responsible, in reverse, for its rise since 1980. In which case we can learn as much about our possible futures from the 20th century decline in the claims of property over humanity, as from their recent reassertion.

Henry Farrell - Piketty, In Three Parts

It's the unfortunate fate of greatly influential books to be greatly misunderstood. When a book is sufficiently important to reshape intellectual and political debates, it escapes, at least to some extent, its author's intentions. People want to latch onto it and use it as a vehicle for their own particular gripes and concerns. Enemies will distort the book further, some because they dislike the book's message, others because they feel that they, rather than the book's author, should have been the messenger adorned by history with laurels. The book will further be subject to the more ordinary forms of misprision and adaptation (some helpful; others less so) that all books are subject to.

These processes of reinterpretation and misinterpretation have been unusually marked for *Capital in the Twenty-First Century* because it is such a big and ambitious book. There are three major parts to it - a big theory, a set of major empirical claims and a (preliminary) set of policy proposals. Most earlier critics have focused on one or another of these three while occluding the others in a kind of chiaroscuro. I want to do something a little different - to separate out the first part from the others so as better to understand one aspect of its contribution, and to argue that the second and third are connected in different ways than most readers understand. Thinking about the book in this way draws out some potentially interesting insights. If the theory is taken as a contribution in itself, rather than an explanation of the observed empirics, it has interesting and important things to say about the dynamics of capitalism that emerge better when treated in isolation. If the empirics are an important contribution, it is more because they establish the social fact of inequality, which in turn has implications for the policy measures that one might propose as an interim measure.

First, the theory. Piketty's famous inequality, r>g, stems from a style of economic reasoning that would have been familiar to the classical economists, but produces a distinct allergic reaction in many modern economists. Most prominently, Daron Acemoglu and James Robinson have argued both that this entire way of thinking about economic problems is wrong, and that it doesn't really explain the observed facts. Acemoglu and Robinson don't have any innate objection to enormous and sweeping historical arguments based on simple models, since that's the business they are in too (their *Economic Theory of Dictatorship and Democracy* sets out to explain vast patterns of historical development on the basis of game theoretic arguments straightforward enough that an undergraduate student could grasp and reproduce them). Instead, their objection is to the *particular kind* of simplicity that Piketty aspires to. Piketty and Acemoglu are institutionalists, whose work explores the proposition that institutions matter in demonstrably causal ways to observed economic outcomes. This helps explain relative levels of prosperity (some sets of institutions are more conducive to economic well being than others). It also helps us understand how power relations bridge the gap between politics and economics. Acemoglu and Robinson's most important contribution (at least from the perspective of a political scientist like me) is to provide a simple possible explanation of how different relationships between elites and non-elites help explain when we may expect democracy and when dictatorship.

Piketty's account is quite different. It's unfair to suggest, as Acemoglu and Robinson do, that institutions play no role in his argument. He's clearly very interested, for example, in the role of educational institutions. However, it is fair to suggest that he doesn't have a fully developed theory of how power inequalities might translate into, for example, differences in the rules governing economic sectors, and that he often prefers cultural explanations (to explain, for example, the shift towards higher paid managers) to institutional ones.

Even so, this critique misses out on what's interesting - and potentially very depressing - about Piketty's theoretical account. Standard economic arguments start from an implicit set of assumptions about the absence of power relations. Perfect competition, by definition, is a state of the economy in which no one actor is more powerful than another - all actors are price takers, not price makers. This leads to a highly fruitful set of arguments about how real life markets - let alone polities - just aren't like that. Markets aren't perfect. Inequalities are rife. And as people like Jack Knight, Doug North when he was wearing his former-Marxist hat and (obviously, far more modestly) me have argued, this provides the foundations for a reasonably excoriating critique of standard economic claims. To the extent that the happy assumptions of perfect competition are not justified, so that power relations matter, we have *no theoretical warrant whatsoever* to believe that powerful and self-interested actors will influence institutions towards socially optimal outcomes. Specifically, these theories draw attention to the *distributional* consequences of institutions - i.e. who gets what. Unequal power leads to unequal influence over the institutions that distribute the benefits of cooperation, which in turn means that the benefits are likely to be distributed in unequal and inefficient ways. Here, there's a hidden theoretical connection between standard economic critiques e.g. of monopoly and left-rationalist critiques of how actually-existing capitalism works. The latter, in a sense, draw the full conclusions of the arguments of the former. Both suggest moreover that in a world where there *weren't* any power disparities, so that actors were fully equal participants in markets and politics, the problems of skewed institutions and unequal distribution of gains would disappear. Bringing conditions closer to the true equality of perfectly competitive markets would largely solve the problem.

Piketty's claim is potentially much more corrosive. For him, the fundamental problem isn't one of flawed markets and unequal power. It's one of markets working as they are supposed to. In Piketty's description (p.27), 'the more perfect the capital market (in the economist's sense, the more likely r is to be greater than g.' Even more bluntly, the $r>g$ inequality (p.424) 'has nothing to do with market imperfections and will not disappear as markets become freer and more competitive. The idea that unrestricted competition will put an end to inheritance and move toward a more meritocratic world is a dangerous illusion.' If Piketty is right, institutional reforms aimed at removing market imperfections will do nothing to address the fundamental problem of economic inequality, and may, indeed, exacerbate it. The problem isn't in the institutions but in market capitalism itself, so that efforts to reform corrupt institutions will not fix the core problem. If you're playing blackjack, you'd prefer to be playing against an honest dealer than a crooked one. But either way, you're going to end up losing money.

This conducts towards an account in which institutions are not the problem, but *can* serve as a brake on the problem. The right kind of institutions can restrain the innate and natural long run tendencies of the market to produce economic inequality. How to get to these institutions is a different problem. If one were to combine parts of Piketty's theory with parts of the theory of his critics, one might well end up concluding that we're all screwed. The innate tendencies towards economic inequality that Piketty describes will lead to institutional dynamics that favor the rich, so that there is no real prospect for countervailing forces. On this account, we end up in the kind of world that William Gibson describes in his novel *The Peripheral* (a world that I suspect owes quite a bit to

Piketty's arguments).

Second, the empirics. Plausibly, the empirical observations that Piketty (and his colleagues - the book reports some of the key results from a much larger project) - report are compatible with a wide variety of causal mechanisms in addition to, or instead of, the mechanisms implied by Piketty's own theory. It may well be that institutional factors play an important role in generating economic inequality. It may also be in part a result of the emergence of new economic sectors. It may be the result of cultural shifts (as Piketty occasionally argues). There is *prima facie* evidence supporting each of these accounts, and others besides. There isn't (as best as I can judge the debates) nearly enough evidence to authoritatively adjudicate between these different plausible mechanisms.

In a sense, however, this isn't the point of the contribution. Piketty is an economist, but his contribution is better understood in sociological terms. As sociologists like Marion Fourcade and sociologically minded political scientists like Martha Finnemore have argued, economic knowledge doesn't appear automatically. Instead, it's the product of social processes of legitimation, in which socially legitimated social structures produce socially legitimated forms of knowledge that are validated in socially legitimated ways. We live in a technocratic age, which among other things means that the kinds of knowledge that appeal to technocrats, such as high quality statistical data, are likely to appear legitimate in ways that other kinds of knowledge are not. Piketty and his colleagues have engaged in slow, patient work, the boring of hard boards, building high quality data sets that appear to confound the previous technocratic wisdom that we didn't need to worry about inequality.

This makes a vast and important social phenomenon, that might otherwise have been partly obscured, visible, salient and *socially undeniable.* This is not to deny that there are other things going on too. If there hadn't been an economic crisis, the reaction would have probably been more muted. Furthermore, knowledge on its own is not a sufficient condition for successful political action (more on this below). Finally, like all statistical knowledge, it is imperfect and open to challenge and improvement. Although efforts to undermine the credibility of the project (such as the notorious Financial Times investigation) have failed, it will continue to get empirical pushback. However, this pushback is likely to further increase the salience of the problem of inequality, by making it a major object of scientific inquiry.

It also helps explain both the positive and negative reactions that Piketty's book has received. If you (whether for principled or unprincipled reasons) don't *want* inequality to be a problem that people pay attention to, and want to try and solve, then the Piketty book is likely to seem like a disaster to you. You'll devote a lot of time and energy to trying to tear it down. Sometimes, this criticism will be useful (ideological bias is the beginning point for most serious argument, as well as most unserious argument). Sometimes it will be a form of denialism. Equally, if you are someone who believes that inequality is a real problem, Piketty's work not only helps to validate your beliefs, but it gives you a new set of tools to understand and explain the world. This is true of activists as well as academics - the language of the 1% and the 99% provides a fascinating example of how a set of statistical findings can provide an interpretive frame to organize an entire social movement.

Finally, it helps explain Piketty's policy prescriptions, some of which are proposed not so much to solve the problem of inequality, as to help generate the *kinds of politics* that might solve the problem. Piketty's entire project could be seen as a bet - that generating increased knowledge about the actual shape of inequality will help generate the kinds of politics that can successfully address inequality. His careful gathering of data and his ingenious search for proxies where data is available (e.g. using publicly visible data on the performance of university endowments as a proxy for the returns to capital available to the merely ordinarily rich and the super rich) all try to cast light on what was invisible and occluded. So too do his policy proposals. For example, his self-admittedly utopian proposal for a global tax on capital is in part motivated by the desire to reduce financial opacity, and to make it clearer just how well the truly rich are doing. He believes that many people don't understand this:

> For … half of the population, the very notions of wealth and capital are relatively abstract. For millions of people, "wealth" amounts to little more than a few weeks' wages in a checking account or low-interest savings account, a car, and a few pieces of furniture. The inescapable reality is this: wealth is so concentrated that a large segment of society is virtually unaware of its existence, so that some people imagine that it belongs to surreal or mysterious entities. That is why it is so essential to study capital and its distribution in a methodical, systematic way.

Yet a truly systematic understanding is impossible given currently available data. A global capital tax could help generate this data.

> The primary purpose of the capital tax is not to finance the social state but to regulate capitalism. The goal is first to stop the indefinite increase of inequality of wealth, and second to impose effective regulation on the financial and banking system in order to avoid crises. To achieve these two ends, the capital tax must first promote democratic and financial transparency: there should be clarity about who owns what assets around the world. … it would generate information about the distribution of wealth. National governments,

> international organizations, and statistical offices around the world would at last be able to produce reliable data about the evolution of global wealth. Citizens would no longer be forced to rely on Forbes, glossy financial reports from global wealth managers, and other unofficial sources to fill the official statistical void. (Recall that I explored the deficiencies of those unofficial sources in Part Three.) Instead, they would have access to public data based on clearly prescribed methods and information provided under penalty of law. The benefit to democracy would be considerable: it is very difficult to have a rational debate about the great challenges facing the world today— the future of the social state, the cost of the transition to new sources of energy, state- building in the developing world, and so on— because the global distribution of wealth remains so opaque.

In part, this policy proposal doubles down on the bet that Piketty's book embodies - it is another way to generate empirically validated knowledge that can inform democratic debate. The implication is that if we (as a democratic society, in the US, France, Ireland or some congeries of these national societies) truly *understood* how rich the rich were, we could do something about it, and perhaps address a number of collective challenges that otherwise seem insuperable.

Obviously, this bet is an uncertain one. Piketty has little to say about the politics through which knowledge generates political action. What one might say is that this and other proposals he makes for knowledge generation might help create a plausibly necessary but insufficient condition for political change. What more we might need than knowledge is difficult to say (I have little idea beyond broad generalities). One plausible surmise though, is that if we're in the world of the theoretical double bind where (a) Piketty is right about the inherent tendency of capitalism to produce enduring economic inequality, and (b) his critics are right about how economic inequality generates political and institutional inequality, we're in a very difficult position. It's unlikely under these conditions that democracy can generate the required political action, regardless of how much knowledge is generated. We need to hope either that capitalism isn't as prone to generate economic inequality as Piketty believes, or that this economic inequality does not translate seamlessly into unequal political power.

Oliver Godechot - Resurgence of Capital or Rise of the Working Rich? On Piketty's Capital in the 21st Century

Capital in the Twenty-First Century was a classic as soon as it was published.[6] It deserves a place on bookshelves beside its illustrious namesake of the 19th century. Capital, in *Capital*, is the wealth of nations. It extends beyond firms' traditional productive capital to encompass the entire public and private patrimony that can be sold on a market (thus excluding non-transferable forms of capital such as human, cultural and social capital). The book is the culmination of fifteen years of individual and collective research on the evolution of income and wealth inequalities. Thanks to data based on the collection of income tax, Thomas Piketty and his colleagues had already widely explored income inequality in France, the United-States, India, China, and more generally in the world by the early 2000s, fuelling a unique and remarkable dataset: the *World Top Incomes Database.* However, this work focused on income rather than wealth, and hence provided an incomplete account of economic inequality. This new book fills in this gap in a very timely fashion.

The thesis of the book could be summarized as follows: the simple fact that the return on capital is durably higher than the economic growth rate feeds implacable dynamics of inequality.

Under these conditions, the relative share of capital (as measured by the national

[6] An earlier version of this was published in French as Godechot Olivier, 2015, "Le capital au XXIe siècle, T. Piketty." Le Seuil, Paris (2013). 970 pp., *Sociologie du travail*, vol.57, 2, p.250-253.

wealth to GDP ratio) increases inexorably. Far from being exceptional, this configuration is currently the norm. Since the 1970s, the decline in the growth rate which is a combination of the decline in the population's growth rate and that in individual productivity, have helped capital come back. In France, the amount of total wealth owned by all public and private actors has gone from a little less than four years of income in the 1970s to more than six in the 2010s.

This resurgence of capital promotes increased inequality in several ways. First, wealth is very unevenly distributed, with the poorer half of the population holding less than 5% and the top 1% holding 25%. The global increase in asset prices thus tends to help the latter. Second, ability to save, and hence to accumulate wealth, increases with income. Third, the higher the wealth, the greater the return on capital, thanks to better financial advice, a weaker preference for liquidity and a greater ability to bet on more remunerative (albeit risky) long term investments. Meanwhile, the increase in wage inequality, due to the emergence of "super-wages" for an elite of CEOs and finance professionals, enables newcomers to find a position among the wealth elite without weakening this elite's domination.

After reaching a low point in 1970, wealth inequality is on the rise again. The share of national wealth owned by the top 1% increased from 28% in 1979 to 34% in 2010 in the United States, from 23% to 28% in the United-Kingdom and from 22% to 24% in France. It is still a long way away from the concentration of wealth in the early 20th century where the top 1% had 60% of national wealth in France and 70% in the UK. However, *Capital* warns us that we may be on our way back to that world if the dynamic of inequality is not halted. According to Piketty, progressive taxation of income and capital (on the level of global regions to limit the problem of tax competition) could set the net return on capital below the economic growth rate and halt the inequality dynamics.

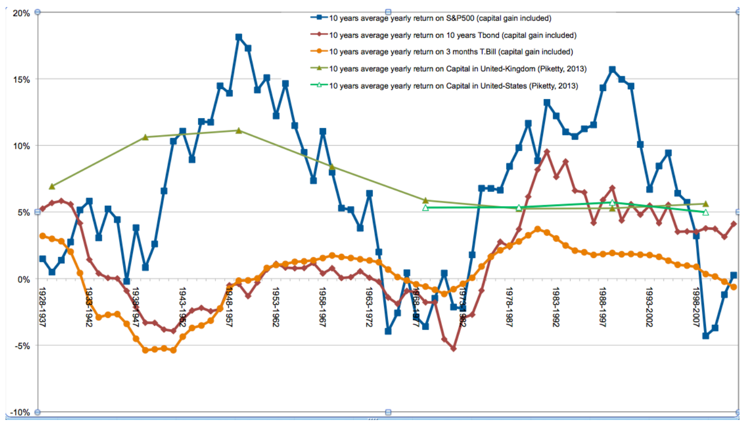
But the book goes far beyond a simple demonstration of the unequal logic of capitalism and the merits of redistributive taxation. It is a remarkable multidisciplinary work on the economic and social history of Western capitalism and inequalities, thanks to a combination of serial statistics and specific examples from literature, film, political history and history of economic thought that illuminates both past events and perceptions. Wealth is the gateway to a new understanding of two centuries of economic, social and political history. The opposition in the nineteenth century between the Old World, dominated by past wealth (with a capital equivalent to seven years of income) and the New World, less subject to such a legacy (with a capital of less than five years of income) is particularly striking. So is in the opposition in the New World between the North of the United States and the South, where slave ownership gave capital a preponderance similar to that measured in Europe at the same period. The shocks of economic crises and inflation peaks, the impact of fiscal policies, sometimes offensive, sometimes accommodating, and moreover the destruction of wars greatly shape the importance and the role of capital.

The book sometimes adopts a Braudelian tone, highlighting deep structures of capitalism, such as the growth rate, that are unbudging and impossible to guide. The decades of growth in the postwar era is an exceptional stage that is futile to feel nostalgic for and try to return to, since it was largely a phase of reconstruction and catch-up. After reaching the technological frontier, growth can only continue in the 21st century at its long-term rate of 1 to 1.5% per year (of which half is due to population growth). It seems slow when measured year by year, but it is very fast and almost unbearable at the scale of centuries. In addition to the growth rate, other factors such as the savings rate, share of value added, and return on capital are also immobile or slowly changing variables that seem to defeat any kind of political action. If these quantities, which are the product of a kind of extended general equilibrium, are not controllable, states still retain their two original powers to shape capital accumulation and its unequal consequences: wars (which one cannot want) and taxes.

Although the book contains many impressive and valuable statistical series, it takes some risks in its treatment of the largely unexplored topic of wealth. These first estimates will benefit from being evaluated, tested, and corroborated by later work. For example, the return on capital, which the author believes to be stable at around 5%, is calculated from aggregate data from national accounts and defined as the ratio between the share of capital in the value added from the income accounts and the estimated value of the national capital in the wealth accounts. Given the numerous conventions that govern the construction of these data, the reconciliation of the macro approach with a micro approach might add a lot, all the more so as the performance of listed shares varies considerably even in the medium-term. The ten-year yield (including capital gains) of the S&P500 (the index of the New York Stock Exchange) is greater than 10% between 1940 and 1960 and between 1980 and 1992, while it is negative or zero between 1965 and 1975 or since 2000 (Figure 1). These significant variations in performance at the micro level leads one to ask whether the resurgence of capital is due to the inexorable mechanics of capitalism or rather a product of contingent financial and real estate bubbles, and more generally due to the phenomenon of financialization. Answering this question could tell us whether, in addition to fiscal policy, a sector-based economic policy of “definancialization” could also contribute to fight inequality.

While the early work of Thomas Piketty and his colleagues focused mostly on income inequality due to the emergence of a new elite, the Working Rich, this new work focuses on wealth and offers a very different diagnostic by showing the resurgence of capital in its most traditional form: inheritance. The various

Figure 1: Comparison of the return on capital over ten years calculated by Thomas Piketty and that on some US famous assets. Note: A portfolio replicating the S&P500 purchased in 1949 and sold in 1958 provides a real annual return of 18% per year (capital gains included).We discount changes due to inflation. Sources: Thomas Piketty's data is available here; those on yields of major US national assets here.



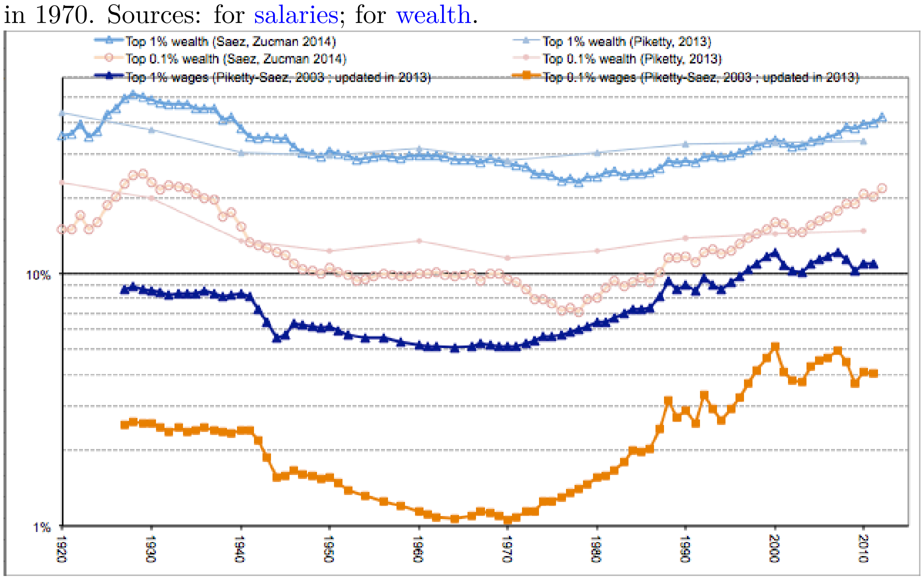
forms of inequality are morally and politically ranked by the frequent use of the concept of merit, a concept difficult to define - and not specified here - sometimes used to describe the collective perception (an emic conception), sometimes that of the analyst (an etic conception). According to the author, wealth inequalities (particularly those that are inherited) violate merit more than income inequality, which contravene merit more than wage inequality.

Although the resurgence of capital is a proper cause of concern, especially for political and moral reasons, should we consider it as the most prominent transformation of contemporary inequalities? Certainly, wealth inequalities are more pronounced than income inequality. But in light of the data presented, their recent growth in the US is much more limited than that of wages. In 2010, the share of the top 1% in wealth is 1.3 times larger (in terms of odds ratios) than it was in 1970. Over the same period, the share of the top 1% in wages increased by a factor of 2.3. Measured by this yardstick, the emergence of the Working

Rich is a more radical transformation than the resurgence of capital. However, it seems that the author, rigorously reasoning his way through incomplete data, has had the remarkable intuition of a phenomenon that the available data only showed imperfectly.

Hence, in a recent work, Gabriel Zucman and Emmanuel Saez (2014) reestimate wealth composition from income tax. This method requires one to make many assumptions to estimate stocks from flows and we must remain careful. Nevertheless, they establish remarkable results that fill in the missing piece of Thomas Piketty's book. According to these new estimates, the top 1%'s share of wealth has increased 1.5 times between 1970 and 2010, moving from 28% to 37% of total US wealth and that of the top 0.1% increased by 2.3 between 1970 and 2010, moving from 10% to 20%. If Emmanuel Saez and Gabriel Zucman's work holds true, then there is indeed a real resurgence of wealth inequality, moving back to its 1920 level. Nevertheless this is smaller in relative amplitude than the rise of the Working Rich: the share of the top 0.1% of wages increased during the same period by 3.9, moving from 1.1% of payroll to 4.1% (Figure 2). It is true that the interpretation of the comparison of two evolutions of percentage depends dramatically on the choice of the metric: additive (+10 percentage points for wealth versus +3 percentage points for wages) or multiplicative (as I do here: *2.3 for wealth versus *3.9 for wages). However, whatever the metrics, the complexity of recent changes in inequality is due to the necessity to think them as both the product of the return of capital and the rise of the Working Rich.

Figure 2: Comparison of the evolution of wealth inequality and wage inequality in the United States. Note: The top 0.1 wage share amounted to 1.1% of payroll in 1970. Sources: for salaries; for wealth.



Martin O'Neill - Piketty, Meade and Predistribution

Thomas Piketty's *Capital in the Twenty-First Century* presents a troubling puzzle for social democrats and for parties of the centre-left, as well as for academics interested in developing a more egalitarian public policy agenda. Supported by a previously unimagined wealth of statistical detail, gained through the archival labour over many years of a large team of researchers, Piketty's book confirms profound concerns about the long-range dynamics of capitalism. Wealth does not naturally disperse down to the many, but sticks to the few, and especially to those who carry the arbitrary advantages of patrimonial inheritance. The facts of inequality are devastating, and come with an accompanying sense of deflation at the level of policy and political action. We may have come to see the grim facts of capitalism's internal dynamics more clearly than ever before, but it is much less clear that we have the tools to cure capitalism's disfiguring disease of accelerating inequality. Hence we see that a common reaction to Piketty's work on the left is one of resignation or even despair. The sardonic good humour and cautious optimism displayed by Piketty himself can seem oddly out of place against the background picture that has been created by his years of ground-breaking research.

The sense that Piketty's book should be seen as a deeply pessimistic one is brought into full focus when we consider the single policy proposal for which he is best known: that is, the idea of a progressive global wealth tax. Such a tax would involve unprecedented levels of cooperation between international tax authorities, alongside a massive shift in the level of detail in reporting the ownership and transfer of both financial and non-financial wealth. Such a proposal sounds like pie in the sky: a wonderful policy if we somehow had a magic wand to change the nature of both the world financial system and of its various (often highly competitive) fiscal systems overnight, but a position inaccessible any time soon from our current circumstances. If we imagine states that could enact the policy that Piketty endorses, then we seem at the same time to be imagining a world in which the concrete problems of unequal power and unequal political influence that are created by large economic inequalities are somehow dissolved. Piketty's hoped-for fiscal fix would seem to involve an impossible act of political bootstrapping.

However, it seems to me that commentators have been too quick both to reduce the implications of Piketty's book to the headline proposals of more aggressive fiscal transfers, and to accuse him of utopianism in putting too much faith in such a solution. Piketty himself is not naive about the short-run possibilities for a technocratic fix for runaway inequality through the actions of some international fiscal authority, seeing his global wealth tax proposal in strategic terms as a 'worthwhile reference point, a standard against which alternative proposals can be measured' (p. 515). Moreover, and more importantly, he also has a more ambitious agenda, speaking of the need for a comprehensive democratic capture of capitalism, in which 'the concrete institutions in which democracy and capitalism are embodied need to be reinvented again and again' (p. 570). This would involve 'the development of new forms of property and democratic control of capital,' with regard to which 'new forms of participation and governance remain to be invented' (p. 569).

Piketty is in fact both more ambitious and more realistic than many of his critics give him credit for being. What he proposes in fact is a broad and comprehensive research programme that would involve finding new ways in which the balance between democracy and capitalism can be reset. His extraordinary empirical work shows the background of increasing inequality, a declining labour share of overall economic returns, and an increased role for patrimonial inheritance, where today's entrepreneur becomes the *rentier* of tomorrow and 'the past devours the future' (p. 571) against which this research programme will have to develop. Piketty, whose contempt for the 'childish passion for mathematics and for purely theoretical and often highly ideological speculation' (p. 32) of contemporary economics is entirely creditable and admirably refreshing, realises full well that this can only be a broad-based research programme across the social sciences, incorporating insights from history, sociology and philosophy as well as economics itself.

Before saying a bit more about where the road from Piketty's remarkable book should lead, I want first to take a step back, and to discuss the fascinating relationship between Piketty's weighty volume and an earlier, contrastingly concise book by the economist James Meade. Published fifty years before Piketty's *Capital in the Twenty-First Century,* James Meade's 1964 book, *Efficiency, Equality and the Ownership of Property* is an astonishingly prescient book that is centrally concerned with the same problems of inequality that drive Piketty's work.

Where Piketty has a team of multinational researchers armed with a wealth of historical data, Meade had to make do with no more than some inspired armchair hunches about the evolution of capitalism, made all the more remarkable by the fact that he was writing at the very high watermark of the *Trentes Glorieuses*, at a time when the labour share of economic returns was high, and inequality was historically low. Gazing into his crystal ball, Meade predicted that the relentless consequence of technological advances would be greatly to increase the productivity of capital relative to labour. He also suspected that (as Piketty and his colleagues went on to demonstrate) inequalities in capital returns between large and small investors would lead to the increasing growth of inequality among the holders of capital. Inequality grows as returns to the savings of the already-wealthy increase much more rapidly than those of more modest savers, even at the same time as the inequality between those with and those without capital holdings grows alongside it, creating a doubled force for divergence.

These twin forces of divergence would lead, Meade thought, to what would be a horrific social outcome, identical in its main features to Piketty's prediction of a return to a new *Belle Epoque.* Meade named his dystopia 'The Brave New Capitalists' Paradise.' Here is his vivid description of it:

> But what of the future? … There would be a limited number of exceedingly wealthy property owners; the proportion of the working population required to man the extremely profitable automated industries would be small; wage rates would thus be depressed; there would have to be a large expansion of the production of the labour-intensive goods and services which were in demand by the few multi-multi-multi-millionaires; we would be back in a super-world of an immiserized proletariat and of butlers, footmen, kitchen maids, and other hangers-on. Let us call this the Brave New Capitalists' Paradise.
>
> It is to me a hideous outlook. What could we do about it? (EEOP, 33)

Meade's problem - that is, the problem of what could be done to prevent the realization of the Brave New Capitalists' Paradise - is in effect the same as Piketty's problem of how to stop the emergence of a new *Belle Epoque.* Meade's solution to this problem was an intriguing one. He thought that the state should take any reasonable means necessary to prevent this dystopian outcome, pursuing three strategies simultaneously. A single egalitarian aim should be realised by a plurality of egalitarian means. Meade's vision was of a new kind of egalitarian social democracy, using a novel combination of both socialist and popular capitalist institutions to create a society that combined economic dynamism with a huge reduction in economic inequality.

Firstly, the traditional forms of redistribution through the welfare state should be protected, both with regard to transfers to the badly-off and the provision of collective public services. But Meade thought that no strategy that did not address the underlying pattern of ownership and control of wealth would go far enough. Public policy could not be concerned only with the flow of income streams, but with the sources of wealth from which they came.

On Meade's view, traditional methods of redistribution simply did not go deep enough, dealing - after the fact - with the symptoms of underlying inequality, rather than providing a more fundamental cure by restructuring patterns of individual and collective ownership within the economy. Only the more fundamental strategy could ensure, stably and in the long run, that the increase in the capital share of national income would be made to work for everyone, and not just for a narrow class of plutocrats. Egalitarian strategy had to be proactive, rather than merely defensive.

Meade's view was that attacking fundamental inequalities of wealth had to involve a double-barrelled strategy, consisting in the creation of a range of private and public institutions and policies, which he brought under the headings of (i) a property-owning democracy and (ii) liberal socialism. Instead of the role of the state being to sweep in as an *ex post* fiscal authority, reallocating the hugely unequal rewards of economic activity, the state's function in shaping the economy should instead be to restructure the rules of the capitalist game from the very start, through these varieties of both private and public forms of what I'll call 'capital *predistribution*'.

Meade's property-owning democracy involves, in effect, changing the nature of property rights such that wealth is much less easily transferable across generations, given that it would be subject to high rates of taxation with regard to both inheritance and gifts *inter vivos*. Wealth would be dispersed across the population, with individual capital holdings for all viewed as an entitlement of citizenship, and the use of a myriad of mechanisms that would spread the returns to capital as broadly as possible. Such mechanisms could take a large number of different forms, including 'the encouragement of financial intermediaries in which small savings can be pooled for investment in high-earning risk bearing securities; measures to promote employee share schemes whereby workers can gain a property interest in business firms; and measures whereby municipally built houses can be bought on the instalment principle by their occupants' (EEOP, 59). The goal would be both to spread capital returns widely across society, and to overcome the forces for divergence between larger and smaller investors.

This 'property-owning democracy' was, though, just half of Meade's strategy of (in my terms) 'capital predistribution.' The other half - his 'Socialist State' - involved the creation of forms of collective, democratic wealth. Meade envisaged the creation of public institutions akin to the sovereign wealth funds that have come to play an increasingly important role in the world economy, such as the Alaskan Permanent Fund or, most impressively, the Norwegian Statens Pensjonsfond Utland (SPU), a collective investment vehicle that owns roughly 1% of global equities. Such forms of public and democratic wealth ownership could be used to fund a citizens' income (as in the Alaskan case), or in any other democratically authorized way that allowed the socialization of increasing returns to capital, and the decoupling of individual life-chances from excessive dependence on outcomes in the labour market.

Unlike John Rawls, whose own influences from Meade are clear even from the names which he gives to different kinds of socioeconomic regime (i.e. property-owning democracy and liberal socialism), Meade did not think that we need to choose between private and public forms of capital predistribution (and neither did he think that either strategy was a replacement for the traditional welfare state). Instead, Meade believed that a more egalitarian future would involve the state doing three things - (i) strengthening the provision of public goods and income transfers through the traditional mechanisms of the social state, whilst simultaneously pursuing capital predistribution in both its (ii) individual and (iii) collective forms. Meade thought that what we need 'is a combination of measures for some socialization of net property ownership and for a more equal distribution of the property that is privately owned' (EEOP, 71), taken as measures 'to supplement rather than to replace existing welfare state policies' (EEOP, 75).

It is only now, fifty years after the publication of Meade's prescient classic, that the full force of his diagnosis of capitalism's inegalitarian ills is becoming clear. It may also be time to pay more attention to his proposals for how those ills might be cured.

This brings us back to Piketty. In *Capital in the Twenty-First Century,* Piketty describes himself as 'following in the footsteps' (p. 582) of Meade (and of Meade's student and Piketty's collaborator, Tony Atkinson). When I discussed these issues with Piketty when he came to London at the time of the publication of his book in English, he had this to say about the relationship between his thinking and Meade's proposals:

> James Meade, just like me, believed that progressive taxation and the development of other forms of property relationships and of other forms of governance are complementary institutions. In the book I probably place too much emphasis on progressive taxation, but I do talk about the development of new forms of governance and property structure, but probably not sufficiently. So I agree with that - that can be for volume two!

Along the same lines, in his recent *Journal of Economic Perspectives article,* 'Putting Distribution Back at the Center of Economics: Reflections on Capital in the Twenty-First Century,' Piketty has returned to what one might describe as the unwritten, Meadean parts of his argument for institutional change to combat inequality:

> I may have devoted too much attention to progressive capital taxation and too little attention to a number of institutional evolutions that could prove equally important, such as the development of alternative forms of property arrangements and participatory governance. (Piketty, 2015, p. 87)

What Piketty's painstaking empirical work has shown is that the besetting problems of inequality that worried James Meade are as bad as Meade had feared. These tendencies towards shocking levels of inequality constitute a deep challenge to the legitimate continuation of capitalism in its current form, and will need to be addressed urgently in the years ahead. Contrary to the occasional misreporting of Piketty's forward-looking views, it is no part of Piketty's view that we can rely on a simple technocratic fiscal fix to solve the problems ahead of us. Mechanisms of redistribution will not be sufficient, but will have to be supplemented by more radical forms of *predistributive* institutional innovation.

If solutions to the problem of inequality are to be as radical as reality now demands, what is instead required is a reimagining of what would be involved comprehensively to tame capitalism through democratic means. This will involve much further development of the kind of plurality of institutional and policy proposals sketched by Meade, and will involve both the private *and* public - individual *and* collective - forms of capital predistribution that Meade advocated. Piketty, like Meade, sees the need for *both* redistribution *and* predistribution, and both see that the institutional means necessary to create a more equal society will involve pursuing a plurality of parallel paths. It is closely in keeping with the spirit of Piketty's *Capital* that the political and intellectual agenda ahead will be one that economics on its own cannot hope to encompass. It's a vital agenda, with high stakes, and presents challenges to both academic researchers and political activists. On the success of this endeavour depends nothing less than the prospects for legitimate continuation of our economic system.

For extremely helpful comments on this essay, I am grateful to Robert Lepenies, Michael Rosen, Alan Thomas, and Stian Westlake.

Kenneth Arrow - Which Inequalities Matter and Which Taxes are Appropriate?

Professor Piketty and his colleagues at the Top Income Distribution Study have put us all in great debt for the great increase in our knowledge of historical development of inequalities in income and in wealth in a number of leading countries.

Notice I have already mentioned two inequalities, income and wealth. There is one more leading inequality which does not receive much attention in Piketty's work: consumption. Papers and books have already appeared which try to measure this inequality. Many more inequalities, e.g. health, educational achievement, race, and gender differences have been the subject of study, but these are more specialized and less central to economic analysis.

There is a strong argument for emphasizing consumption. Why, after all, do we consider inequality in wealth, income, or consumption to be undesirable? If we consider only economic arguments, it is because the poor are being deprived of goods that are valuable to their lives, exactly because they are more basic than the desires of the rich.

This has important implications for how we evaluate Piketty's arguments about inequality. It suggests an alternative metric of inequality, one under which some of the problems that Piketty identifies are not, in fact, problematic.

Consider a world, like that envisioned by Piketty, in which the rich consume relatively little (compared with their property income). They accumulate wealth by investing in industry, thereby increasing output in the future. If they do not consume more in the future, but instead, simply continue to accumulate, then the additional future output is available for the consumption of the poor.

If, instead of being available to the poor, the additional output were somehow reinvested in the productive sector, we would find a world in which the ratio of investment to consumption is steadily rising. This is not the world we live in, and would produce visible results contrary to even casual observation.

In the neoclassical picture, consumption is the ultimate end of the economy. The rich accumulate for ultimate consumption, perhaps of generations in the far future, or, in some significant part, for philanthropy. Piketty seems instead to have a picture of the economy as a process of automatic accumulation, without regard to planned consumption. Estates grow at the market rate of return (100% saving out of property income). This is not a realistic account of how rich people – or indeed anybody – treats their income. It also leads us to ignore the politics of how this wealth is actually consumed.

Taking consumption seriously has important implications for measurement. If we are truly concerned with inequality, we should be most concerned with the distribution of consumption. The measurements we should look to are measurements of inequality in consumption, since it is differences in consumption that we really ought to care about.

This also has implications for policy: for example, if what we care about is differences in consumption, we might consider a progressive tax on total consumption of an individual. This would have to be done on an annual basis, like the current income tax, not at point of sale. Such a tax was long ago proposed by John Stuart Mill and later by Irving Fisher and Nicholas Kaldor. Piketty refers to Kaldor's work but does little to refute it, saying only that no such tax exists. This is true, but of course the progressive wealth tax favored by Piketty is equally untried in practice.

We might be especially moved to consider a consumption tax if we consider that Piketty's proposed wealth tax seems in any case to be much higher than it sounds. If we are to assume, say a 5% return on property, then a 2% per annum tax on wealth would amount to about 40% of property income. If investment is financed by property income, this implies a very considerable reduction in investment. Is this desirable? One might doubt it, especially since the effects on investment would be substantial, even apart from incentive effects, which might also be quite considerable.

John Quiggin - Piketty and the Australian Exception

Over the past forty years, leading developed economies, most notably the United States have experienced an upsurge in inequality of income and wealth. Most of the benefits of economic growth have accrued to those in the top 1 per cent of the income distribution. Meanwhile, living standards for those in the bottom half of the income distribution have stagnated or even declined.

Piketty's work, published in reports and academic journals, has documented these trends. His book, Capital, not only brought the issues to the attention of a broader public, but presented an analysis suggesting that worse is to come. Piketty argues that we are in the process of returning to a 'patrimonial' society, in which income from inherited wealth is the predominant source of inequality.

Piketty's work has previously focused mainly on the United States, but the research presented in Capital points to similar trends in the United Kingdom. Although inequality has grown much less in France, the third country on which he has detailed data, Piketty argues that the same trend will emerge unless there is a substantial change in political conditions.

To the extent that there is a general trend of the kind described by Piketty, we would expect it to emerge first in the English speaking world, where the shift to market liberalism and financialised capitalism was earlier and more complete. And, indeed, a sharp increase in inequality may be observed in other English speaking countries including Canada and New Zealand.

Australia, on the other hand, looks like a counterexample. On most measures of inequality Australia looks more like France than like the rest of the English speaking world. Although Australia's have experienced an increase in inequality on most measures, the general picture is one of broadly distributed improvements in living standards, as illustrated by Peter Whiteford's contribution to a recent seminar on Piketty published by the Australian Economic Review (AER). As Whiteford notes:

> Income growth was highest for the richest 20 per cent of the population, at close to 60 per cent in real terms, but even for the poorest 20 per cent, real incomes grew by more than 40 per cent between 1996 and 2007.

Other measures such as the Gini coefficient and the ratio of median to mean income tell a similar story. Inequality has increased over the period since the 1980s, but only modestly and with frequent reversals.

Turning to the top 1 per cent of the income distribution, evidence from tax data, presented by Roger Wilkins in the AER volume suggests that the share of income accruing to this group has risen, but not to the same extent as in other English speaking countries This is consistent with the observations of Piketty himself, who notes:

> the upper centile's [top 1 per cent] share is nearly 20 percent in the United States, compared with 14–15 percent in Britain and Canada and barely 9–10 percent in Australia.

Much of the credit for this comparatively benign outcome must go to the Labor government that held office from 1983 to 1997 and implemented a relatively progressive version of the market liberal reform agenda. Labor managed a reform of the Australian tax and welfare system that shielded low income Australians from the worst effects of the market liberal revolution that swept the English speaking world in the 1970s and 1980s.

In most countries, policies of financial deregulation, privatisation and microeconomic reform were accompanied by regressive changes to the tax and welfare systems. By contrast, Labor introduced broadly progressive tax reforms including a capital gains tax and a crackdown on tax avoidance.

Rather than treating welfare payments and tax policy as separate, the restructuring sought to integrate the two, taking account of the combined impact of means tests and tax policies to optimise the balance between efficiency and redistribution.

These changes weren't sufficient to prevent growing inequality of income and wealth, and some of them were eroded over time. Nevertheless, in broad terms, a redistributive tax–welfare system was maintained under the succeeding conservative government, even as it was being eroded in other English-speaking countries.

Labor returned to office in 2007, just in time to make its next big contribution: the fiscal stimulus that allowed Australia to avoid the recession generated by the Global Financial Crisis in nearly every other country. In combination with previous successful pieces of macroeconomic management, such as the Reserve Bank's handling of the Asian Financial Crisis in the 1990s, the result has been an economic expansion lasting nearly 25 years, unparalleled in Australia's economic history, and scarcely equalled anywhere in the world. The strength of the labour market has encouraged a broad spread of prosperity not seen elsewhere.

Together these factors explain why Australia has avoided the drastic increases in inequality seen in other English speaking countries. On the other hand, although Australia's a long way from the plutocracy that already characterises the United States, there is no room for complacency.

Australia's relatively equal distribution of income and wealth depends on a history of strong employment growth and a redistributive tax–welfare system. Neither can be taken for granted. The end of the mining boom has inevitably resulted in slower growth which bears hardest on those at the bottom of the income distribution. And, as elsewhere, the political pressure to take burdens from the rich and shift them to the poor is never-ending.

Moreover, Australia has not proved itself immune to the political dynamic, noted by Piketty, by which increasing personal wealth allows the wealthy to dominate politics, then enact policies that protect their own wealth. The archetypal example is Silvio Berlusconi in Italy but the situation in the United States is arguably worse. The majority of members of the US Congress are millionaires, with not much difference between Democrats and Republicans.

Given the pattern of highly unequal incomes, and social immobility observed in the US today, we can expect inheritance to play a much bigger role in explaining inequality for the generations now entering adulthood than for the current recipients of high incomes and owners of large fortunes. Inherited advantages in the patrimonial society predicted by Piketty will include direct transfers of wealth as well as the effects of increasingly unequal access to education, early job opportunities and home ownership.

The move towards a patrimonial society already happening in the US is evident at the very top of the Australian income distribution. As in the US, the claim that the rich are mostly self-made is already dubious, and will soon be clearly false. Of the top 10 people on the Business Review Weekly (BRW) rich list, four inherited their wealth, including the top three. Two more are in their 80s, part of the talented generation of Jewish refugees who came to Australia and prospered in the years after World War II. When these two pass on, the rich list will be dominated by heirs, not founders.

The same point is even clearer with the BRW list of rich families. As recently as 20 years ago, all but one of these clans were still headed by the entrepreneurs who had made the family fortune in the first place. Now, all but one of the families are rich by inheritance.

So, Australians have no room for complacency. In an economy dominated by capital, and in the absence of estate taxation, there is little to stop the current drift towards a more unequal society from continuing and even accelerating.

On the other hand, Australia's relative success in using the tax and welfare systems to spread the benefits of economic growth provides grounds for optimism elsewhere in the world. Australia's experience belies the claim that any attempt to offset the growth of inequality must cripple economic growth. On the contrary, the evidence suggests that there is plenty of scope for progressive changes to tax policy that would partly or wholly offset the trends towards greater inequality documented by Piketty.

Thomas Piketty - Capital, Predistribution and Redistribution

In my view, *Capital in the 21st Century* is primarily a book about the history of the distribution of income and wealth. Thanks to the cumulative efforts of several dozen scholars, we have been able to collect a relatively large historical database on the structure of national income and national wealth and the evolution of income and wealth distributions, covering three centuries and over 20 countries. In effect, we have been extending to a larger scale the pioneering historical data collection work of Simon Kuznets and Tony Atkinson (see Kuznets, 1953, and Atkinson and Harrison, 1978). My first objective in this book is to present this body of historical evidence in a consistent manner, and to try to analyze the many economic, social and political processes that can account for the various evolutions that we observe in the different countries since the Industrial Revolution (see Piketty and Saez, 2014, for a brief summary of some of the main historical facts). Another important objective is to draw lessons for the future and for the optimal regulation and taxation of capital and property relations. I stress from the beginning that we have too little historical data at our disposal to be able to draw definitive judgments. On the other hand, at least we have substantially more evidence than we used to. Imperfect as it is, I hope this work can contribute to put the study of distribution and of the long run back at the center of economic thinking.

In this essay, I seek to discuss a number of implications of my findings, in particular regarding the optimal regulation of capital and the complementarity between the "predistribution" and the "redistribution" approach. I will also attempt to address some of the very valuable comments made by the participants to the Crooked Timber symposium. First, I will clarify the role played by $r>g$ in my analysis of wealth inequality. Next, I will present some of the implications for optimal taxation, starting with inheritance taxation and then moving with annual taxation of wealth, capital income and consumption. Finally, I will emphasize the need to develop a multi-sector approach to capital accumulation. This will lead me to stress the limits of capital taxation and the complementarity with other public policies aimed at regulating the accumulation and distribution of capital (such as land use, housing policies, intellectual property rights, co-determination and participatory governance).

What $r>g$ can and cannot explain

In my analysis, the size of the gap between r and g, where r is the rate of return on capital and g the economy's growth rate, is one of the important forces that can account for the historical magnitude and variations in wealth inequality. In particular, it can contribute to explain why wealth inequality was so extreme and persistent in pretty much every society up until World War I (see *Capital…*, Chapter 10).

That said, the way in which I perceive the relationship between $r>g$ and inequality is often not well captured in the discussion that has surrounded my book. For example, I do not view $r>g$ as the only or even the primary tool for considering changes in income and wealth in the 20th century, or for forecasting the path of inequality in the 21st century. Institutional changes and political shocks - which to a large extent can be viewed as endogenous to the inequality and development process itself - played a major role in the past, and it will probably be the same in the future. In addition, I certainly do not believe that $r>g$ is a useful tool for the discussion of rising inequality of labor income: other mechanisms and policies are much more relevant here, e.g. supply and demand of skills and education. For instance, I point out in my book (particularly Ch. 8-9) that the rise of top income shares in the US over the 1980-2010 period is due for the most part to rising inequality of labor earnings, which can itself be explained by a mixture of three groups of factors: rising inequality in access to skills and to higher education over this time period in the United States, an evolution which might have been exacerbated by rising tuition fees and insufficient public investment; exploding top managerial compensation, itself probably stimulated by changing incentives and norms, and by large cuts in top tax rates (see also Ch. 14; Piketty, Saez and Stantcheva, 2014); changing labor market rules and bargaining power, in particular due to declining unions and a falling minimum wage in the United States (see Ch.9, fig.9.1). In any case, whatever the relative weight one chooses to attribute to each factor, it is obvious that this rise in labor income inequality in recent decades has little to do with *r-g*.

I should also make clear that there are many important issues regarding the determinants of labor income inequality which are not adequately addressed in my book. As rightly argued by Margaret Levi (this symposium), the changing nature of the workplace and the evolution of organized interests - particularly unions - do not play a sufficiently important role in my analysis (see however the discussion on salary scales and unions in Chap.9). As Danielle Allen (this symposium) rightly points out, education does not matter solely – and arguably not primarily – for reducing inequality in skills and labor market outcomes: it also plays a key role in fostering participation to the democratic process, which in turn largely determines inequality dynamics. The role played by gender and racial inequality and discrimination is also insufficiently analyzed, as pointed out by Anne Cudd (this symposium). I do stress the importance of foreign ownership, colonial coercion and slavery in the historical evolution of private wealth since the Industrial revolution, particularly in Britain, France and the

United States (see Chap.3-5). But the issue of labor market discrimination is largely neglected. More generally, although I do try to show the importance of beliefs systems and perceptions about inequality and its legitimacy, Chris Bertram (this symposium) is perfectly right to point out that this could and should be addressed in a much more systematic manner in the future.

$r>g$ and the amplification of wealth inequality

I now clarify the role played by $r>g$ in my analysis of the long-run level of wealth inequality. Specifically, a higher r-g gap will tend to greatly amplify the steady-state inequality of a wealth distribution that arises out of a given mixture of shocks (including labor income shocks).

Let me first say very clearly that $r>g$ is certainly not a problem in itself. Indeed, the inequality $r>g$ holds true in the steady-state equilibrium of the most common economic models, including representative-agent models where each individual owns an equal share of the capital stock. For instance, in the standard dynastic model where each individual behaves as an infinitely lived family, the steady-state rate of return is well known to be given by the modified "golden rule" $r = \theta + \gamma\ g$ (where θ is the rate of time preference and γ is the curvature of the utility function). E.g. if θ=3 percent, γ=2, and g=1 percent, then r=5 percent. In this framework, the inequality r>g always holds true, and does not entail any implication about wealth inequality.

In a representative-agent framework, what $r>g$ means is simply that in steady-state each family only needs to reinvest a fraction g/r of its capital income in order to ensure that its capital stock will grow at the same rate g as the size of the economy, and the family can then consume a fraction $1\text{-}g/r$. For example, if r=5 percent and g=1 percent, then each family will reinvest 20 percent of its capital income and can consume 80 percent. This tells us nothing at all about inequality: this is simply saying that capital ownership allows to reach higher consumption levels - which is really the very least one can ask from capital ownership.[7]

So what is the relationship between *r-g* and wealth inequality? To answer this question, one needs to introduce extra ingredients into the basic model, so that inequality arises in the first place.[8] In the real world, many shocks to the wealth trajectories of families can contribute to making the wealth distribution highly unequal (indeed, in every country and time period for which we have data, wealth distribution within each age group is substantially more unequal than income distribution, which is difficult to explain with standard life-cycle models of wealth accumulation). There are demographic shocks: some families have many children and have to split inheritances in many pieces, some have few; some parents die late, some die soon, and so on. There are also shocks to rates of return: some families make good investments, others go bankrupt. There are shocks to labor market outcomes: some earn high wages, others do not. There are differences in taste parameters that affect the level of saving: some families consume more than a fraction *1-g/r* of their capital income, and might even consume the full capital value; others might reinvest more than a fraction *g/r* and have a strong taste for leaving bequests and perpetuating large fortunes.

A central property of this large class of models is that for a given structure of shocks, the long-run magnitude of wealth inequality will tend to be magnified if the gap *r - g* is higher. In other words, wealth inequality will converge towards a

[7] The inequality $r<g$ would correspond to a situation which economists often refer to as "dynamic inefficiency": in effect, one would need to invest more than the return to capital in order to ensure that one's capital stock keeps rising as fast as the size of the economy. This corresponds to a situation of excessive capital accumulation.

[8] In the dynastic model with no shock, there is no force generating inequality out of equality (or equality out of inequality), so any initial level of wealth inequality (including full equality) can be self-sustaining, as long as the modified Golden rule is satisfied. Note however that the magnitude of the gap *r-g* has an impact on the steady-state inequality of consumption and welfare: if *r-g* is small then high-wealth dynasties need to reinvest a large fraction of their capital income, so that they do not consume much more than low wealth dynasties.

finite level. The shocks will ensure that there is always some degree of downward and upward wealth mobility, so that wealth inequality remains bounded in the long run. But this finite inequality level will be a steeply rising function of the gap r-g. Intuitively, a higher gap between r and g works as an amplifier mechanism for wealth inequality, for a given variance of other shocks. To put it differently: a higher gap between r and g allows to sustain a level of wealth inequality that is higher and more persistent over time (i.e. a higher gap r-g leads both to higher inequality ad lower mobility). Technically, one can indeed show that if shocks take a multiplicative form, then the inequality of wealth converges toward a distribution that has a Pareto shape for top wealth holders (which is approximately the form that we observe in real world distributions, and which corresponds to relatively fat upper tails and large concentration of wealth at the very top), and that the inverted Pareto coefficient (an indicator of top end inequality) is a steeply rising function of the gap r - g. The logic behind this well-known theoretical result (which was established by many authors using various structure of demographic and economic shocks; see in particular Stiglitz, 1969) and this "inequality amplification" impact of r - g is presented in Chapter 10 of my book.[9]

The important point is that in this class of models, relatively small changes in r - g can generate large changes in steady-state wealth inequality. E.g. simple simulations of the model with binomial taste shocks show that going from r-g=2% to r-g=3% is sufficient to move the inverted Pareto coefficient from b=2.28 to b=3.25. Taken literally, this corresponds to a shift from an economy with moderate wealth inequality - say, with a top 1 percent wealth share around 20-30 percent, such as present-day Europe or the United States - to an economy

[9]For detailed references to this literature on dynamic wealth accumulation models with random shocks, see the on-line appendix to chapter 10 available at piketty.pse.ens.fr/capital21c. See also Piketty and Zucman (2015, section 5.4).

with very high wealth inequality with a top 1 percent wealth share around 50-60 percent, such as pre-World War 1 Europe.[10]

Available micro-level evidence on wealth dynamics confirm that the high gap between r and g is one of the central reasons why wealth concentration was so high during the 18th-19th centuries and up until World War 1 (see Ch. 10; Piketty, Postel-Vinay, Rosenthal (2006, 2014)). During the 20th century, it is a very unusual combination events which transformed the relation between r and g (large capital shocks during 1914-1945 period, including destruction, nationalization, inflation; high growth during reconstruction period and demographic transition; higher bargaining power for organized labor). In the future, several forces might push toward a higher r-g gap (particularly the slowdown of population growth, and rising global competition to attract capital) and higher wealth inequality. But ultimately which forces prevail is relatively uncertain. In particular, this depends on the institutions and policies that will be adopted in many different areas.

I should also stress that the dynamics of wealth inequality always involve country-specific factors. Each country has its own unique relation to inequality and the concentration of wealth. In my book, I particularly stress the contrast between European and North American patterns. But this is true for other parts of the world, as exemplified for instance by John Quiggin (this symposium) about Australia's egalitarian tradition and specific trajectory with respect to inequality.

It should also be noted that the impact of growth slowdown on the gap r-g is fundamentally ambiguous. In the benchmark dynastic model outlined above

[10] In the special case with binomial saving taste shocks with probability p, one can easily show that the inverted Pareto coefficient is given by b= log(1/p)/log(1/ω), with ω=s $e^{(r-g)H}$ (s is the average saving taste, r and g are the annual rate of return and growth rate, and H is generation length). See Piketty and Zucman (2015, section 5.4) for simple calibrations. Atkinson, Piketty and Saez (2011, figures 12-15) provide evidence on the long-run evolution of Pareto coefficients.

(which might not be particularly plausible), it all depends on the value of curvature of the utility function (smaller or larger than one). More generally, this will depend on the structure of intertemporal preferences and saving motives, as well as on the parameters of the production technology (in particular the elasticity of substitution between capital labor). In multi-sector models of capital accumulation, which as I argue below are far more realistic, almost anything can happen, depending in particular on the specific rules, relative prices, institutions and changing bargaining power of the various social groups in the relevant sectors.

In my book I also emphasize the fact that the measurement of capital income is biased in different ways in high-growth and low-growth societies. That is, high growth periods arguably require more entrepreneurial labor in order to constantly reallocate capital and benefit from higher returns (in other words, measured rates of return must be corrected downwards in order to take into account mismeasured labor input in high-growth societies, particularly in reconstruction periods). Conversely, measured rates of returns might be closer to pure returns in low-growth societies (where it is relatively easier to be a rentier, since capital reallocation requires less attention). In my view, this is one of the main reasons with low-growth societies are likely to be characterized by a higher gap between r and g (where r is the pure rate of return to capital, i.e. after deduction for formal and information portfolio management costs and related entrepreneurial labor).[11] This is certainly an issue that would deserve additional research in the future.

On the optimal progressive taxation of income, wealth and consumption

I now move to the issue of optimal taxation and redistribution. The theory

[11] Indeed the historical estimates on pure rates of return that I present in my book are largely built upon this assumption. See the discussion in Chapter 6.

of capital taxation that I present in *Capital in the 21st Century* is largely based upon joint work with Emmanuel Saez (see in particular Piketty and Saez 2013a). In this paper, we develop a model where inequality is fundamentally two-dimensional: individuals differ both in their labor earning potential and in their inherited wealth. Because of the underlying structure of demographic, productivity and taste shocks, these two dimensions are never perfectly correlated. As a consequence, the optimal tax policy is also two-dimensional: it involves a progressive tax on labor income and a progressive tax on inherited wealth. Specifically, we show that the long-run optimal tax rates on labor income and inheritance depend on the distributional parameters, the social welfare function, and the elasticities of labor earnings and capital bequests with respect to tax rates. The optimal tax rate on inheritance is always positive, except of course in the extreme case with an infinite elasticity of capital accumulation with respect to the net-of-tax rate of return (as posited implicitly in the benchmark dynastic model with infinite horizon and no shock). For realistic empirical values, we find that the optimal inheritance tax rate might be as high as 50-60%, or even higher for top bequests, in line with historical experience.[12]

In effect, what we do in this work is to extend the "sufficient statistics" approach to the study of capital taxation. The general idea behind this approach is to express that optimal tax formulas in terms of estimable "sufficient statistics" including behavioral elasticities, distributional parameters, and social preferences for redistribution. Those formulas are aimed to be robust to the underlying primitives of the model and capture the key equity-efficiency trade-off in a transparent way. This approach has been fruitfully used in the analysis of optimal labor income taxation (for a recent survey, see Piketty and Saez 2013b). We follow a similar route and show that the equity-efficiency trade-off logic also ap-

[12] See Piketty and Saez, 2013a, fig.1-2 and table 1. Note that the optimal inheritance tax rate can also be expressed as an increasing function of the gap r-g.

plies to the taxation of inheritance. This approach successfully brings together many of the existing scattered results from the literature.

Next, if we introduce capital market imperfections into our basic inheritance tax model, then we find that one needs to supplement inheritance taxes with annual taxation of wealth and capital income. Intuitively, in presence of idiosyncratic shocks to future rates of return, it is impossible to know the lifetime capitalized value of an asset at the time of inheritance, and it is optimal to split the tax burden between these different tax instruments. For instance, assume I received from my family an apartment in Paris worth 100 000€ back in 1975. In order to compute the optimal inheritance tax rate, one would need to know the lifetime capitalized value of this asset. But of course, back in 1975, nobody could have guessed that this asset would be worth millions of euros in 2015, or the annual income flows generated by this asset between 1975 and 2015. In such a model, one can show that it is optimal to use a combination of inheritance taxation and annual taxation of property values and capital income flows (Piketty and Saez, 2013a).

One difficulty is that optimal tax formulas soon become relatively complicated and difficult to calibrate, however. In particular, the optimal split between annual taxes on wealth stock and annual taxes on capital income flows depends on the elasticity of rates of return with respect to taxation (i.e. the extent to which observed rates of return are sensitive to individual effort and portfolio decisions, as opposed to idiosyncratic, uninsurable shocks). Naturally, intertemporal substitution elasticities also play a role. Substantial additional research is necessary before we can provide a realistic, complete calibration of the optimal capital tax system (which involves a mixture of progressive taxes on inheritance, annual wealth holdings and annual capital income flows).

In my book, I propose a simple rule-of-thumb to think about optimal annual tax rates on wealth and property. Namely, one should adapt the tax rates to the observed speed at which the different wealth groups are rising over time. For instance, if top wealth holders are rising at 6-7% per year in real terms (as compared to 1-2% per year for average wealth), as suggested by Forbes-type wealth rankings (as well as by recent research by Saez and Zucman (2014) suggesting that US wealth concentration has increased even more in recent decades than what I argue in the book, as pointed out by Olivier Godechot in this symposium), and if one aims to stabilize the level of wealth concentration, then one might need to apply top wealth tax rates as large as 5% per year, and possibly higher (see Ch. 15; see also Ch. 12, Tables 12.1-12.2). Needless to say, the implications would be very different if top wealth holders were rising at the same speed as average wealth. One of the main conclusions of my research is indeed that there is substantial uncertainty about how far income and wealth inequality might rise in the 21st century, and that we need more financial transparency and better information about income and wealth dynamics, so that we can adapt our policies and institutions to a changing environment, and experiment different levels of wealth tax progressivity. This might require better international fiscal coordination, which is difficult but by no means impossible (Zucman, 2014).

An alternative to progressive taxation of inheritance and wealth is the progressive consumption tax (see e.g. Gates 2014, and the essay by Ken Arrow in this symposium). This is in my view a highly imperfect substitute, however. First, meritocratic values imply that one might want to tax inherited wealth more than self-made wealth, which is impossible to do with a consumption tax alone. Next, and most importantly, the very notion of consumption is not very well defined for top wealth holders: personal consumption in the form of food or clothes is bound to be a tiny fraction for large fortunes, who usually spend most of their resources in order to purchase influence, prestige and power. When the Koch brothers spend money on political campaigns, should this be counted as part of their consumption? When billionaires use their corporate jets, should this be included in consumption? A progressive tax on net wealth seems in my view more desirable than a progressive consumption tax, first because net wealth is easier to define, measure and monitor than consumption, and next because it is better indicator of the ability of wealthy taxpayers to pay taxes and to contribute to the common good (see Ch.15).

Capital-income ratios vs capital shares: towards a multi-sector approach

One of the important findings from my research is that capital-income ratios $\beta = K/Y$ and capital shares α tend to move together in the long run, particularly in recent decades, where both have been rising. In the standard one-good model of capital accumulation with perfect competition, the only way to explain why β and α move together is to assume that the capital-labor elasticity of substitution σ that is somewhat larger than one (which could be interpreted as the rise of robots and other capital-intensive technologies).[13]

Let me make clear however this is not my favored interpretation of the evidence. Maybe robots and high capital-labor substitution will be important in the future. But at this stage, the important capital-intensive sectors are more traditional sectors like real estate and energy. I believe that the right model to think about rising capital-income ratios and capital shares in recent decades is a multi-sector model of capital accumulation, with substantial movements in *relative* prices, and with important variations in bargaining power over time (see *Capital...*, Ch. 3-6). Indeed, large upward or downward movements of real estate prices play an important role in the evolution of aggregate capital values

[13] With $Y=F(K,L)=[aK^{(\sigma-1)/\sigma}+(1-a)L^{(\sigma-1)/\sigma}]^{\sigma/(\sigma-1)}$, the marginal productivity of capital is given by $r=F_K = a\,(Y/K)^{1/\sigma} = a\,\beta^{-1/\sigma}$, and the capital share is given by $\alpha=r\beta=a\beta^{(\sigma-1)/\sigma}$. See Piketty and Zucman (2014, 2015).

during recent decades, as they did during the first half of the 20th centuries. As rightly argued by J.W. Mason (his symposium), movements in relative asset prices play an absolutely central role in the dynamics of wealth-income ratios. Changes in relative asset prices – particularly real estate prices - can in turn be accounted for by a complex mixture of institutional and technological forces, including rent control policies and other rules regulating relations between owners and tenants, the transformation of economic geography, and the changing speed of technical progress in the transportation and construction industries relative to other sectors (see Ch. 3-6; Piketty and Zucman (2014)). In practice, intersectoral elasticities of substitution combining supply and demand forces can often be much higher than within-sector elasticities (see e.g. Karababounis and Neiman (2014) about the role played by the declining relative price of equipment).

More generally, one central reason why my book is relatively long is because I try to offer a detailed, multidimensional history of capital and its metamorphosis. Capital ownership takes many different historical forms, and each of them involves different forms of property relations and social conflict, which must be analyzed as such (see e.g. my analysis of slave capital in 19th century U.S. in Ch.4; see also Ch.5 on the stakeholder German capitalism model, with large gaps between the social and market values of corporations). This multidimensional nature of capital creates substantial additional uncertainties regarding the future evolution of inequality, as illustrated by the examples of housing and oil prices. In my view, this reinforces the need for increased democratic transparency about income and wealth dynamics.

Property, predistribution and redistribution

Finally, let me conclude by making clear that the historical and political approach to inequality, property relations and institutions that I develop in my book should be viewed as exploratory and incomplete. In particular, I suspect that new social movements and political mobilizations will give rise to institutional change in the future, but I do not pursue this analysis much further. As I look back at my discussion of future policy proposals in the book, I may have devoted too much attention to progressive capital taxation and too little attention to a number of institutional evolutions that could prove equally important. Because capital is multidimensional and markets are imperfect, capital taxation needs to be supplemented with other asset-specific policies and regulations, including for instance land use and housing policies and intellectual property right laws. In particular, as rightly argued by Elizabeth Anderson in this symposium, monopoly power and the regulation of intellectual property rights play an important role in the dynamics of private wealth accumulation. Given the central role played by changing real estate values and rent levels in the aggregate evolution of capital-income ratios and capital shares in recent decades, it is clear that land use and housing policies have potentially a critical role to play, in particular to regulate and expend access to property. On the other hand, it is equally clear that such policies are sometime difficult to implement (e.g. public construction policies or housing subsidies have not always been very successful in the past), so they should certainly be viewed as complementary rather than substitute to progressive taxation.

Also, in my book I do not pay sufficient attention to the development of other alternative forms of property arrangements and participatory governance. One central reason why progressive capital taxation is important is because it can also bring increased transparency about company assets and accounts. In turn, increased financial transparency can help to develop new forms of governance; for instance, it can facilitate more worker involvement in company boards. In other words, "social-democratic" institutions such as progressive taxation (see

Miriam Ronzoni in this symposium) can foster institutions that question in a more radical manner the very functioning of private property (note that progressive capital taxation transforms large private property as a temporary attribute rather than a permanent one – already a significant change). However these other institutions - whose aim should be to redefine and regulate property rights and power relations - must also be analyzed as such – a step that I do not fully follow in this book.

In his essay, Martin O'Neill (this symposium) stresses the proximity between my views and those of James Meade's ideas about the "property-owning democracy". I could not agree more. In particular, I think that the opposition between "predistribution" and "redistribution" – which became relatively common in policy debates since the 1990s, particularly in the context of New Labour Britain – is largely misguided. Both approaches are complementary, not substitutes. Like Meade, I believe that progressive taxation of income, inheritance and wealth is important both for redistribution and predistribution: of course it is an indispensable tool in order to limit market-induced inequality ex post; but it also reduces asset inequality ex ante, and most importantly it helps foster financial transparency, without which economic democracy and alternative forms of property cannot flourish. The logic of redistribution and the logic of opportunities, rights and participation must be pursued together. Atkinson's recent book on "Inequality – What can be done" beautifully illustrates how Meade's line of thought can be pursued in order to develop a new progressive agenda for the 21st century, with capital endowments financed by progressive inheritance taxation, new forms of public property funds, and more genuine economic and social democracy.

The last chapter of my book concludes:

> Without real accounting and financial transparency and sharing of information, there can be no economic democracy. Conversely, without a real right to intervene in corporate decision-making (including seats for workers on the company's board of directors), transparency is of little use. Information must support democratic institutions; it is not an end in itself. If democracy is someday to regain control of capitalism, it must start by recognizing that the concrete institutions in which democracy and capitalism are embodied need to be reinvented again and again (p. 570)

I do not push this line of investigation much further, which is certainly one of the major shortcomings of my work. Together with the fact that we still have too little data on historical and current patterns of income and wealth, these are some of the key reasons why my book is at best an introduction to the study of capital in the 21st century.

References

Atkinson, Anthony and Alan Harrison, Distribution of Personal Wealth in Britain, 1923-1972, Cambridge University Press, 1978

Atkinson, Anthony, Thomas Piketty and Emmanuel Saez, « Top Incomes in the Long Run of History », *Journal of Economic Literature*, 2011, vol.49(1), pp.3-71.

Gates, W., "Why Inequality Matters", Gates Notes, October 2014

Karabarbounis, Loukas and Brent Neiman, "Capital depreciation and Labor shares around the World: Measurement and Implications," *NBER Working Paper*, 2014

Kuznets, S., Shares of Upper Income Groups in Income and Savings, 1913-1948, National Bureau of Economic Research, 1953

Piketty, Thomas, Capital in the 21st Century, Harvard University Press, 2014

Piketty, Thomas, Gilles Postel-Vinay and Jean-Laurent Rosenthal, "Wealth Concentration in a Developing Economy: Paris and France, 1807-1994," *American Economic Review*, 2006, 96(1), pp.236-256

Piketty, Thomas, Gilles Postel-Vinay and Jean-Laurent Rosenthal, "Inherited vs. Self-Made Wealth: Theory and Evidence from a Rentier Society (1872-1927)," *Explorations in Economic History*, 2014.

Piketty, Thomas and Emmanuel Saez, "A Theory of Optimal Inheritance Taxation," *Econometrica*, 2013a, vol.81(5), pp.1851-1886

Piketty, Thomas and Emmanuel Saez, "Optimal Taxation of Labor Income," *Handbook of public economics*, North-Holland, 2013b, vol.5, chap.7, p.391-474.

Piketty, Thomas and Emmanuel Saez, "Inequality in the long run," Science, 2014

Piketty, Thomas, Emmanuel Saez, and Stefanie Stantcheva, "Optimal Taxation of Top Labor Incomes : A Tale of Three Elasticities", *American Economic Journal : Economic Policy*, 2014

Piketty, Thomas and Gabriel Zucman, "Capital is Back: Wealth-Income Ratios in Rich Countries 1700-2010," *Quarterly Journal of Economics*, 2014.

Piketty, Thomas and Gabriel Zucman, "Wealth and Inheritance in the Long Run," in *Handbook of Income Distribution*, A. Atkinson and F. Bourguignon, eds., volume 2, Elsevier, 2015

Saez, Emmanuel and Gabriel Zucman, "The Distribution of Wealth, Capital Income, and Rates of Returns in the U.S. Since 1913," NBER Working paper, 2014

Stiglitz, J.E., "Distribution of Income and Wealth Among Individuals," *Econometrica*, 1969, vol.37(3), pp. 382-397

Zucman, Gabriel, "Taxing Across Borders: Tracking Personal Wealth and Corporate Profits," *Journal of Economic Perspectives,* 2014.