DYNAMICS OF INEQUALITY

Your new book, Capital in the Twenty-First Century, synthesizes the results of a deeply impressive research programme, using a comparative, long-term approach. The results for different countries in terms of wealth distribution are remarkably uniform; they represent a challenge both to ‘convergence’ theories and to the notion that levels of inequality tend to decline over time. How do you explain the relative lack of national specificities—and to what extent can these long-run results serve to predict the future?

Capital in the twenty-first century outlines a general interpretative framework for data that has been collected by an entire team. It’s very different from my 2001 book on top incomes in France, in that it looks at some two dozen countries, instead of just one, covers a period of several centuries and considers wealth in terms of assets, as well as incomes. The important thing about assets is that the available data allow us to take a longer view of wealth inequalities; income tax was not introduced in most Western countries until the early 20th century, so on that basis we can’t go back far enough to put the two world wars into proper perspective. Shifting the focus from income to assets, including inherited wealth, allows us to transform the investigative model and deepen the temporal framework back to the Industrial Revolution, studying the dynamics at work in the 19th century. This widening of scope would have been impossible without the help of my colleagues.

As for the similarities between countries, these need to be drawn out from the data and established in the analysis. I’ve tried to do so without overlooking national histories of wealth—for example, the role played by...
capital from the slave trade in the United States, the Rhineland model in Germany, or the scale of the British national debt in the 19th century, which swelled private wealth by creating financial rentiers on top of the existing land rentiers. The situation was different in France, because the national debt was settled several times and nationalization played a central role. So, each country has its own specificities and its own cultural history. National responses to inequality also depend on how the country perceives itself in relation to others. For example, the United States has often justified its domestic inequality by contrast to that of Europe. Either Europe has been seen as the land of privilege—which led to Americans imposing a confiscatory tax on top incomes in the early 20th century in order to avoid resembling old Europe, which they regarded as highly inegalitarian—or, conversely, they’ve denounced Europe’s collectivism and egalitarianism, as has happened in recent decades. Each country sees its own model as intrinsically more just.

My emphasis on certain universal laws, such as the relation between the growth rate and returns on capital, doesn’t imply any belief in absolute economic determinism—on the contrary. However, the similarities cannot be ignored. In the 20th century European states shared the experience of the two world wars. The dynamics of inequality evolved along similar lines in all of them: disparities grew rapidly during the Belle Epoque, with an unheard-of concentration of wealth, then gradually declined after 1914 due to the social transformations brought about by conflict, decolonization and the development of the welfare state. But since the 1980s they have been rising again. The countries suffered different degrees of material destruction in 1914–18 and 1939–45, but the political shocks and the burdens of war-time expenditure ultimately had similar effects on their economies. This was true of the UK, for example, which suffered less destruction than France or Germany, but nevertheless came out of the Second World War with its private wealth greatly reduced. During the trente glorieuses, this reduction in private-wealth levels led to the illusion that we had entered a new phase of capitalism—

1 Thomas Piketty, *Capital in the Twenty-First Century*, Cambridge, MA 2014. This text is based on an interview by Alice Béja and Marc-Olivier Padis, ‘Le retour du capital et la dynamique des inégalités’, *Esprit*, November 2013; the last six questions were posed by nlr.

a kind of capitalism without capital, or at least without capitalists. But capitalism had not been superseded in any structural way; instead this was essentially a transitional phase of reconstruction. Wealth was restored, albeit gradually. It’s only today, in the early 21st century, that we find the same levels of wealth as in the years leading up to the First World War: around six times annual national income, as opposed to little more than twice national income in the 1950s.

National differences persist, of course; for example, in Germany the rate of valorization of capital has been lower than in France because, among other things, in the Rhineland model business ownership is divided between shareholders and employees. Yet despite this, there are still general tendencies—notably, that growth rates are lower than returns on capital, and consequently there is a tendency for inequalities to increase rather than decline. This has been the case for long periods of human history, with the exception of the 20th century (Figure 1).

**Figure 1: After-tax rate of return vs growth rate at world level, 1–2200 AD**

![Graph showing after-tax rate of return vs growth rate at world level, 1–2200 AD](piketty.pse.ens.fr/en/capital21c)
The thesis of convergence, which posits that inequality will automatically diminish as capitalism develops, has fragile theoretical and empirical foundations. It is largely based on a hypothesis formulated by Simon Kuznets in the 1950s. He observed a narrowing of income differences in the United States between 1910 and 1940; economists wanted to believe in these optimistic results and turned them into a law. In reality that reduction of inequalities owed a great deal to the world wars, but people got it into their heads that there was some universal theoretical mechanism which produced a tendency towards harmony. Another factor was that there have actually been very few historical studies of inequality, in part because of the disciplinary separation between history and economics.

I’ve aimed to give a balanced view of the dynamics in play. There are of course some forces of convergence, the most striking being the diffusion of knowledge. Currently, per capita levels of production are very similar between the advanced-capitalist countries—Europe, the United States, Japan; average annual per capita income is around €30,000 in all these countries. The differences are minimal, despite wide variations in national social models and compulsory tax rates. It’s possible that this process of convergence will continue and will include some of the emerging countries as well. But, if we look at the dynamics of wealth, there are powerful pressures towards divergence, both within countries and at the global level (Figure 2). In a world of weak growth, the fact that returns on capital are higher than growth rates tends automatically to increase inherited inequalities of wealth.

*So is it only external shocks, such as wars, that can limit this accumulation?*

Growth can offset the concentration process. But weak growth can’t offset it very much. Both Marx and the neoliberals are wrong about growth. Marx ignores it, while the neoliberals believe it’s the solution to all problems. For Marx growth is due solely to the accumulation of capital; there is no autonomous increase in productivity. The logical contradiction of capitalism identified by Marx is that the capital-to-income ratio increases ad infinitum, so return on capital must eventually fall to zero. The capitalist system is intrinsically unstable and naturally leads to revolution. The experience of the 20th century shows that this schema is too bleak in economic terms (and too mechanical in its political conclusions). Increased productivity and population growth (Figures 3 and 4, overleaf)
have made it possible to balance Marx’s equation and avoid the tendential fall in returns. But the point of equilibrium can only be reached at an extremely high level of accumulation and wealth concentration, incompatible with democratic values. There’s nothing in economic theory to guarantee that the level of inequalities at the balancing point will be acceptable; nor does anything guarantee the presence of automatic stabilizing mechanisms that might create a general equilibrium.

Some have claimed that the rate of return on capital will ‘naturally’ decline to the level of the growth rate. Historically, however, there is no evidence for this. Throughout most of human history the growth rate was zero, but there was still a return on assets—typically, an average return of 4–5 per cent from ground rent. Indeed this was the foundation of the social order, since it enabled a group of people, the landowning aristocracy, to live off that revenue. The fact is that the rate of return on assets has been consistently higher over the long term than the rate of growth; that doesn’t pose any logical problems, but it does raise the
question as to whether the reproduction and reinforcement of inequality that such a ratio creates is acceptable, in a democratic context.

In the 20th century, it was widely believed that the forces of rationalism would lead to the elimination of economic rent, in the sense of excess returns obtained due to positional advantage. We can see this in the evolution of language. Today ‘rent’ is systematically associated with ‘monopoly’. When ECB President Mario Draghi is asked what should be done to save Europe, he says that we need to combat rent-seeking, by which he means opening up protected sectors such as taxis and pharmacies, as though only competition could purge economic rent. But the fact that returns on capital are higher than the growth rate has nothing to do with monopolies, and cannot be resolved by more competition. On the contrary, the purer and more competitive the capital market, the greater the gap between return on capital and the growth rate. The end result is the separation of owner and manager. In this sense the very goal of market rationality runs counter to that of meritocracy. The aim of market institutions is not to produce social justice, or to reinforce democratic values; the price system knows neither limits nor morality. Indispensable as it is, there are things that the market cannot do, for which we need specific institutions. It is too often believed that the natural forces of competition and growth will by themselves ceaselessly reshuffle individual positions. But in the 20th century it was primarily wars that razed the past to the ground and dealt the cards anew. Competition in itself will not guarantee social and democratic harmony.

Capital in the Twenty-First Century reaffirms the importance of economic history, which entails engaging with the other social sciences. How can research free itself from the dominance of mathematized economic theory to effect this transformation?

I regard myself as a social scientist as much as an economist. When you’re studying questions such as the distribution of wealth, the boundaries are fluid and approaches must of necessity be combined. After finishing my doctorate at the Ecole normale supérieure I spent the early 1990s in the United States, teaching at MIT and elsewhere, and was very struck by the self-satisfaction of economists in the universities there. They were convinced that their methods were far more scientific than those of their colleagues in the so-called ‘soft’ sciences such as sociology, history, anthropology. But their ‘science’ was often highly ideological.
**Figure 3: World growth rates per capita, 1–2100 AD**

Source: piketty.pse.ens.fr/en/capital21c

**Figure 4: Total world growth rates, 1–2100 AD**

Source: piketty.pse.ens.fr/en/capital21c
Since the fall of the Berlin Wall, economists have played a major part in the idealization of the market, in the United States and around the world. Despite my scientific background, I have always been drawn to history. From the outset I tried to gather data on the historical evolution of wealth distribution, because there was very little around. Contrary to what you sometimes hear, historical data do exist, you just have to take the time to gather them, for example by going to the Ministry of Finance archives or the probate records. I have nothing against theory, but it must be used sparingly: a small amount of theory can explain many facts. But most of the time economists do the opposite. They fill the air with theories, giving themselves the illusion of being scientific, though the factual basis for them may be extremely fragile.

At several points you draw on literature to convey the changing nature of inequality. In the works of Balzac and Austen, characters’ assets and incomes are systematically noted; readers of the day knew what these signified. In contemporary literature, this scale has been lost: there is little reckoning of the characters’ economic conditions. Have inequalities acquired a kind of cognitive invisibility, rendering them more socially acceptable?

The book stems in large part from the fear that, little by little, social structures are irremediably changing, without us taking account. The dynamics are not readily intelligible, and there’s a real risk that we will wake up to find a society even more inegalitarian than that of the 19th century, because it will combine the arbitrariness of inherited inequalities with a meritocratic discourse that makes the ‘losers’ responsible for their situation—because their productivity is too low, for example. The potential for representing these inequalities in literature has been reduced by, among other things, the disappearance of monetary benchmarks. In the 19th century, when there was no inflation, these were set in stone. Every reader immediately understood what was meant by the sums mentioned in Balzac and Austen. But the growth and high inflation of the 20th century wiped away such benchmarks. Figures date quickly and today we may even find it hard to relate a salary from the 1990s to a particular standard of living or purchasing power.

More generally, collective faith in progress and rising living standards mean that there’s a refusal to imagine a modern world as unequal as that of the 1800s. Of course, we’re not there yet, and I don’t want to fall into catastrophism. But under certain conditions, it could happen; there’s a
willed blindness to the logic of contemporary dynamics. For example, the national statistics offices decline to publish top incomes—generally, they don't go above the 90th centile, officially so as not to 'incite populism' and envy. With this logic, it would have been possible to bring out a report in 1788 saying that everything was fine, since the aristocracy made up only 1 or 2 per cent of the population. But in a country like France or Britain, 1 per cent is still 500,000 or 600,000 people; in the US, it is 3 million. That many people take up a good deal of space; they structure a social order. The aim is not to incite jealousy—social distinctions do not pose problems if they are useful to all, as Article 1 of the Declaration of the Rights of Man and the Citizen of 1789 makes clear ('Social distinctions may only be founded on common utility'). But they have to be regulated when they start running counter to the common good.

It amounts to a real abdication of responsibility when researchers and public institutions fail to describe existing inequalities in accurate terms. It leaves the field open to wealth rankings by magazines like Forbes, or the Global Wealth Reports put out by big banks, who take on the role of 'knowledge producers'. But the methodological basis for their data remains unclear; the results are largely ideological, a hymn to entrepreneurship and well-deserved fortunes. Moreover, the simple fact of focusing on the 'richest five hundred' is a way of depoliticizing the issue of inequality. The number is so small that it becomes meaningless. It appears to show extreme inequalities, but in reality it gives a mollifying picture. Inequalities have to be grasped in a more extensive fashion. For example, if one takes fortunes of over €10 million, rather than over €1 billion, they amount to a very significant proportion of total wealth. We need the right tools to represent inequality. The American movement of the 99 per cent was one way of doing this. Focusing on the richest 1 per cent makes it possible to compare different societies that would otherwise seem incommensurate. Talking about ‘top executives’ or ‘rentiers’ may seem more accurate, but these terms are historically specific.

Contemporary inequalities are sometimes portrayed as a ‘war of generations’, in which the young are deprived of their social inheritance, which is being squandered on the post-war baby boomers. What's your view of this?

Two great illusions about inequality emerged from the trente glorieuses. The first is the ‘war of generations’ approach which holds that, with the rise in life expectancy, assets have become a way of transferring income
from work to retirement. When you're young, you're poor, but you then accumulate income which you consume when you retire. This offers a reassuring view of wealth inequality, since it suggests that everyone will be poor and then rich in turn, which would be legitimate enough. But it accounts for only a tiny part of the accumulation and concentration of wealth: in reality, wealth inequality is almost as great within generations as between them; in other words, the generational war has not replaced the class war. One reason for this is the cumulative dimension of concentration: wherever you have accumulation and inheritance of wealth, concentration accelerates. To give a concrete example, it is easier to save—and so to accumulate wealth—when you have inherited a flat and don't have to pay rent. Pay-as-you-go pensions may add to this, in the sense that they help to preserve accumulated wealth, since people don't need to consume their capital in retirement.

The second illusion is the theory of ‘human capital’. It’s based on the idea that with technological development, human skills would take precedence over industrial plant, buildings, machinery and so on; there would be more and more need for individual expertise and less and less for non-human capital—real estate, material and financial assets. According to this hypothesis, shareholders would be replaced by managers. Well, this hasn't happened. If skills have progressed, so has non-human capital, and the relation between the two hasn't changed that much. One could even envisage a 21st-century robot economy, in which human capital’s share of national income would decline. This is not to say that the worst is bound to happen, but that the market has no automatic correction mechanism. We need to create institutions that can play this corrective role. I argue that a progressive tax on private capital would be one such mechanism.

You highlight the role of taxation in the final section of Capital in the Twenty-First Century, in which you discuss various scenarios for escaping the debt trap, including repayment, inflation and default. Debt, of course, is one of the factors that foster the perpetuation of huge fortunes, since it creates financial rentiers. Why do you advocate taxation as a solution?

What I’m advocating is not just any old tax, but a progressive tax on capital, which is more appropriate than income tax to the ‘patrimonial capitalism’ of the 21st century—which is not to say that income tax should be abolished. A tax on private capital is crucial for combating
rising inequalities, but it would also be a useful tool for resolving public-debt crises, with contributions from each according to their wealth. That would be the ideal, difficult but indispensable to attain. At the heart of every great democratic revolution in the past there has been a fiscal revolution, and the same will be true of the future.

Inflation is a tax on the capital of the poor. It reduces the value of small assets—individual bank balances—while shares and real estate are protected. It isn’t the right solution, but it’s the easiest. Another possibility is to impose a long period of penance, as the UK did in the 19th century to clear its debt. But that can take decades, and in the end more is spent on debt interest than on investment in education. In many ways, government debt is a false problem: it represents a loan from ourselves. In terms of private wealth, Europe has never been so rich; it’s the states that are poor. So the problem is one of distribution. This simple reality has been forgotten. Europe has enormous advantages: its social model, its inherited living standards; it represents 25 per cent of global GDP. It has sufficient geographical space to regulate capitalism effectively. But it isn’t thinking ahead into its own future.

You supported the Socialist Party in the 2012 French elections and offered advice on the redistributive fiscal policies it should pursue. Are you surprised that Hollande’s government has instead embraced the leading demands of the Employers’ Federation?

I’m not really surprised. Hollande was elected primarily because the electorate wanted to get rid of his predecessor, which was certainly a good thing. But he didn’t really have a policy platform to follow.

You provide a compelling long-term projection of the inequalities arising from rates of return on capital that exceed rates of growth. Yet your prediction of future growth rates—1.2 per cent for the advanced and 4–5 per cent for the emerging economies through to 2030, with world growth slowing to 1.5 per cent by 2050—seems to rely on a somewhat mechanical concept of catch-up and convergence. What’s your reaction to the alternative view that stresses not convergence per se but capitalist dynamics: systemic over-capacity in manufacturing, hence falling profit rates, driving down wages and diverting investment into financial products, with weakening demand sustained only by massive credit creation?
I attempt to base my conclusions about future growth rates on the analysis of previous developments, which result from the forces of capitalist dynamics and competition. Note that falling growth rates are the product not only of convergence, but more importantly, of the end of population growth. This makes it even more likely that there will be a large, permanent gap between the rate of return on capital and the growth rate of the economy in the future. One important difference between Marx’s conclusions and my own is that Marx believed in the falling rate of profit, which in a way offers an economic solution to the problem of the long-term evolution of the capitalist system. I don’t believe such a solution exists. On the basis of historical evidence and theoretical reasoning, I conclude that the rate of return—of which the rate of profit is just one component—may very well remain permanently higher than the growth rate, as it was up to the late 19th and early 20th centuries.

Could you say more about the empirical data you use to support the claim for a historical rate of return—understood as including rents, etc., as well as profits—of 5 per cent?

The first two sections of the book, addressing the dynamics of the capital/income ratio, rely mainly on historical national accounts. These in turn are based on a large variety of sources, including censuses of wealth—land values, real-estate values, stock-market capitalization—as well as company accounts, rent series, and so on. The online Appendix to the book contains a full account of the primary sources on which I draw, as well as all the relevant data files, mainly in Excel or Stata formats.

You’ve also done pioneering work on fiscal data. While this is clearly superior to reliance on household surveys for the study of inequalities in wealth and income, is there not still a problem with widespread tax avoidance by large corporations? Similarly, are you confident that your data fully capture the accumulation of wealth in business partnerships, such as the multi-trillion-dollar funds managed by BlackRock? When ownership rights are layered in such complex ways, is it possible to avoid both under- and over-estimating their impact on wealth distribution?

The main reason why we need financial transparency—a global register of financial assets, as well as a progressive global tax on capital—is

---

3 Available at piketty.pse.ens.fr/capital21c
precisely because we need more democratic knowledge of who owns what. There is considerable uncertainty today about the exact level of wealth concentration, and this serves to undermine the possibility of having an informed and democratic debate about the proper rate and shape of taxation. On the basis of the imperfect data I have put together, I think we need a steeply progressive capital tax in order to keep the dynamics of global wealth concentration under control. But first and foremost I think we need more financial transparency in order to produce commonly accepted facts.

You attribute the unprecedented lessening of income inequalities between 1914 and 1975 primarily to the shocks of the two world wars and the policy responses that followed. Your argument places little weight on the equally unprecedented strength of organized labour during this period, in mass workers’ parties and trade unions, and makes no mention of the threat posed by Communism in the East, as a pressure on capital to make concessions in the West. What role has the weakened position of labour played in the increase of inequalities since the 1980s?

The lessening of income inequalities between 1914 and 1975 was due both to the shocks of the world wars, and to the policy responses that followed. Radical political changes—the rise of progressive taxation, social security, organized labour, and so on—did play an enormous role. My point is simply that these changes, including of course the Bolshevik Revolution and the resulting threat in the East, were largely products of the shocks induced by the wars and the Great Depression. Prior to 1914, there was no natural tendency toward the reduction of inequality. The political system was formally democratic, but it didn’t really respond to the high and rising level of wealth concentration. The reduction of inequality during the 20th century was largely the product of violent political upheavals, and not so much of peaceful electoral democracy. I think this helps to explain the fragility of the consensus on which some of the earlier institutions were built, and why they’ve come under serious attack since the 1970s–80s. The fall of Communism around 1990 clearly also contributed to the rise of unlimited faith in laissez-faire private capitalism in the 1990s and 2000s.

You question whether the sustained levels of inequality that you predict for the rest of the 21st century will be compatible with democratic values. Aren’t you idealizing democratic forms, which have presided imperturbably over
rising inequality during the past four decades? With falling electoral turnout, and the programmatic convergence of centre-right and centre-left parties, the support of a mere 27 per cent of voters is sufficient to return a pro-market government to office, as we’ve seen in Greece. What reason is there to think this arrangement will not survive the 21st century?

I am not particularly optimistic about the future. Lessons from the past suggest that violent disturbances often play a major role, and that formal democratic institutions do not always respond to rising inequality, in particular because they can be captured by financial elites. But I want to believe that we can learn from past catastrophes and find more peaceful, sustainable ways to regulate capitalist dynamics.

Translated by Trista Selous