

The Dynamics of Capitalism and Inequality

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The fundamental contribution of Thomas Piketty's *Capital in the Twenty-First Century* is his investigation of the dynamics of capitalist systems over the *longue durée*. He shows, with a conviction that at times is almost prophetic, the intrinsic instability of capitalist economies and societies. Inequalities of wealth and income obey implacable economic logics linked to the accumulation of private capital, and in general their increase is only interrupted by the intrusion of exogenous shocks.

The Unstable Dynamics of Capitalism

A major characteristic of the economic dynamics outlined by Piketty is the limited role played by mechanisms of internal regulation—when they are not simply absent, which is generally the case. Economists long considered that while the distribution of added value between the remuneration of labor and that of capital did not follow a strict rule, the ratio was nonetheless relatively stable; in other words, their magnitude could oscillate around a mean value without the emergence of any long-term trend. An average proportion of two-thirds (remuneration of labor) to one-third (remuneration of capital) seemed to be respected. John Maynard Keynes even considered this to be the best-established regularity in all of economic

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science, and Nicholas Kaldor made it one of his six famous “stylized facts.”¹ Such an observation made it possible to catch a glimpse of a form of regulation, justified for example in terms of effective demand and the Keynesian circuit. Piketty excludes such a hypothesis—and the macroeconomic considerations that may be associated with it—because it is contradicted by his statistical reconstructions: “It is important to point out that no self-corrective mechanism exists to prevent a steady increase of the capital/income ratio, β , together with a steady rise in capital’s share of national income, α .”² This instability of α occupies a central place in his analysis. It is described by what he calls the first law of capital, $\alpha = r\beta$, which is in fact an accounting identity. Even if it can be supposed that the ever-greater accumulation of capital (increase in β) leads to a decline in rates of profit (reduction of r), this is not sufficient to prevent an increase in α . The main reason is that modern technology still employs a great deal of capital and that capital is used in many diverse ways: “Under these conditions, there is no reason why capital’s share must decrease over the very long run, even if technology changes in a way that is relatively favorable to labor.”³ The recent trend in the profit margins achieved by companies in the most advanced capitalist countries, except in the very short term of the 2008 crisis, confirms his argument.

Another (at least partially) regulatory process often invoked by economists, notably Karl Marx and more recently the regulation school, is associated with economic crises. Two aspects need to be distinguished: Does the growth of inequality favor the onset of crises? And do crises lead to a decline in inequality? As Piketty observes, the share of the top decile in US national income peaked twice over the course of the twentieth and twenty-first centuries, in 1928 and in 2008. In both cases, the rise in inequality and the stagnation of a section of the population’s purchasing power had recessive effects, establishing fertile ground for the outbreak of a crisis—an interpretation apparent, for example, in Peter Temin’s explanation of the 1929 crisis in terms of insufficient effective demand.⁴ Piketty does not avoid the question of under-consumption, but considers it a secondary element, especially

1. Nicholas Kaldor, “A Model of Economic Growth,” *Economic Journal* 67, no. 268 (1957): 591–624.

2. Thomas Piketty, *Capital in the Twenty-First Century* (Cambridge/London: Harvard University Press, 2014), 221–22. As a reminder, α measures the fraction of national income assigned to the remuneration of capital, r measures the average rate of return on capital, and β measures the ratio of capital/national income, which is an indicator of the weight of capital within the national economy. Piketty’s thinking on this subject has changed since he referred to a “striking empirical regularity,” the fact that “it appears that profits and wages always divide in such a way as to award one-third of national income to capital and two-thirds to labor”: Piketty, *The Economics of Inequality* [1997], trans. Arthur Goldhammer (Cambridge/London: Harvard University Press, 2015), 40. This evolution is no doubt explained by the “greater historical perspective and newly available data” that he cites in *Capital*, 41ff.

3. Piketty, *Capital*, 224.

4. Peter Temin, *Did Monetary Forces Cause the Great Depression?* (New York: Norton, 1976); Temin, *Lessons from the Great Depression* (Cambridge: MIT Press), 1989.

for the 2008 crisis where “a potentially more important cause of instability [was] the structural increase of the capital/income ratio.”⁵ As for the effect of crises on the pattern of inequality, it has to be acknowledged that even the most intense examples have exerted little regulatory effect. Take the 1929 crisis, for example. The French curve shows no significant changes in the top 10 percent of wage and capital incomes before the late 1930s and the lead-up to war, and this chronology is even more marked in the American case, where no decline in inequality appears before the early 1940s. The conclusion to be drawn from these statistical observations is that short-term movements only marginally modify the long-term tendency, which is thus the only one that really interests Piketty.

This long-term trend raises all the more questions, for, if there is no regulation in the medium term, the economic process is not stationary over the very long term. The ordinary effect of capitalism is to produce inequality, and the history of this fact presents a combination of repeated patterns and new situations. Patrimonial capitalism is in no way new: it consists to a large extent of reiterations of past situations, in particular those of the Belle Époque, a period to which Piketty returns several times on account of its similarities to the present day. Observing for example that the current annual flow of inherited wealth in France, Germany, and the United Kingdom is similar to that of a century ago (between 8 and 12 percent of national income), he concludes that capital and the rentier are back.⁶ This repetition is hardly a perfect reproduction, however. In fact, there are notable differences: there is less concentration in the top percentile; the diffusion of wealth to the lower levels of society has allowed a “patrimonial middle class” to emerge; the rise of a pronounced inequality in wages over the last two to three decades has given a—very small—proportion of salary earners the opportunity to build patrimonial wealth. Inequality in terms of accumulated wealth thus remains (though it is less pronounced in Europe than in the United States, where the peak of 1910 has almost been reached⁷), but it is no longer distributed in the same way. This is an important difference, since the increase and diversification of the number of rentiers makes the perpetuation of patrimonial and financial capitalism as it now exists socially and politically easier to envisage.

The notion of equilibrium is thus absent from Piketty’s description of the dynamics of capitalism, where it is replaced by the confrontation of opposing forces.

5. Piketty, *Capital*, 298.

6. Thomas Piketty and Gabriel Zucman, “Capital is Back: Wealth-Income Ratios in Rich Countries, 1700–2010,” *Quarterly Journal of Economics* 129, no. 3 (2014): 1255–310.

7. In 2010, the top decile of the American population owned between 70 and 75 percent of the total wealth, compared to 80 percent in the 1910s. In France, the figures for the same dates were respectively 60 to 65 percent and almost 90 percent, as set out in Piketty, *Capital*, 340 and 341, figs. 10.1 and 10.2. This concentration is only partly explained by the enrichment of entrepreneurs, since, as Paul Krugman notes, six of the ten wealthiest Americans are now heirs, a situation probably not very different from that of the Gilded Age: Krugman, “Wealth over Work,” *New York Times*, March 23, 2014. The situation in the United Kingdom lies between those of the United States and continental Europe.

These forces in no way guarantee stability, in fact quite the contrary: “The second conclusion, which is the heart of the book, is that the dynamics of wealth distribution reveal powerful mechanisms pushing alternately toward convergence and divergence. Furthermore, there is no natural, spontaneous process to prevent destabilizing, inegalitarian forces from prevailing permanently.”⁸ The radical and original character of this analysis, which brings to light the fundamentally unbalanced dynamics of capitalism, should be emphasized. In this regard, we are closer to Marx’s account of the capitalist mode of production, permanently strained by its internal contradictions—even if Piketty’s analysis is in no way Marxist in its principles—than to the tradition of economic thought, which has always been more preoccupied with the question of equilibrium and deviations from equilibrium,⁹ and therefore privileges the factors of convergence toward equilibria at the expense of other considerations.

In particular, it is clear what separates Piketty’s representation of the long term from the many other studies that trace trend curves characterized by a regime of stability, however defined. This is of course true of the Kuznets curve,¹⁰ whose inverted U-shape—long regarded as one of the most notable stylized economic facts until it was undermined by historical studies of inequality—suggested that the progressive reduction of inequality was a characteristic of mature capitalist systems. But it is also true of the classical school, for the hypotheses concerning rates of return and changes in price components formulated by David Ricardo, Thomas Malthus, and John Stuart Mill predicted a steady-state future. A similar observation could be made about the neoclassical theory of growth since Robert Solow, which envisages a future where the growth rates of all countries converge as they catch up with the world technological frontier. And much the same conclusion would emerge if one considered the analyses of cycles, epitomized by the long cycles (alternating upward and downward movements lasting approximately twenty-five years) known as Kondratiev waves. For very different reasons, these approaches to capitalism over the long term share a common feature, manifested in their presentation of a horizon of expectation for the economy that is stable and sometimes—as for Kuznets and certain neoclassical theorists of growth—optimistic. In short, they all put forward an irenic vision of the social universe, in the ideological tradition of the old theories of *doux commerce* that Albert Hirschman considered a political justification of capitalism.¹¹

How to explain the profound instability that Piketty underlines? The major cause lies in the confrontation of forces that create divergence in wealth between individuals and those that produce convergence—a confrontation that, given the

8. Piketty, *Capital*, 21.

9. Jean-Claude Perrot, “Histoire des sciences, histoire concrète de l’abstraction,” in *Des sciences et des techniques : un débat*, ed. Roger Guesnerie and François Hartog (Paris: Éd. de l’EHESS, 1998), 25–37.

10. Simon Kuznets, “Economic Growth and Economic Inequality,” *American Economic Review* 45, no. 1 (1955): 1–28.

11. Albert O. Hirschman, *The Passions and the Interest: Political Arguments for Capitalism before Its Triumph* (Princeton: Princeton University Press, 1977).

scale of what is at stake, might be described as titanic. The main force for divergence lies in the fact that, tendentially, the rate of profit r is higher than the growth rate g of the economy. Mechanically this means that individual wealth increases more rapidly than the economy as a whole, even if the savings rate is low. This $r > g$ inequality plays an essential role in Piketty's argument.¹² It constitutes one of the major contradictions of capitalism, whose perpetuation in the long term seems threatened by its very operation. But the shift to a theoretical explanation is not easy. In his attempt to find a satisfactory foundation, Piketty evokes several possible factors, the most notable being the "time preference" in favor of the present that supposedly characterizes economic agents for whom the return on capital is compensation for not using it immediately. Piketty is nevertheless only half-satisfied with this classical explanation, which relies on a rudimentary psychology (optimization by agents within the framework of an infinite horizon) and is scarcely sufficient to explain a stability that persists through several historical periods and covers very different economic structures. In fact, the major argument is not theoretical but empirical: "I take this to be a historical fact, not a logical necessity,"¹³ writes Piketty, for whom the few graphs showing the comparative trends of the growth rate and the rate of return on capital over time constitute a more important basis for reflection than any theoretical preliminary—despite their clear limitations in terms of historical precision. Whereas the long-term growth rate lies between 1 and 2 percent, the rate of return on capital generally oscillates between 4 and 6 percent. Even after taxes and capital losses, the rate of return on capital is always higher than the growth rate, with the exception of one period during the twentieth century that is in fact rather difficult to identify chronologically.¹⁴

Piketty devotes less attention to the forces of convergence because describing them is less essential to understanding inegalitarian dynamics within capitalism. They are moreover heterogeneous, since the reduction of inequalities is favored by the sum of the following circumstances: (1) when the economic configuration is such that $r < g$; (2) when essentially exogenous events, mainly wars, induce a devaluation, even a destruction, of capital; (3) when tight fiscal policies impose limits on capital accumulation and transmission. But since (1) is a historically exceptional phenomenon (limited to a few decades after the Second World War) and (2) is fortunately not readily reproducible, taxation remains the only method available to combat excessive inequalities.

One should not mistake the intention of *Capital in the Twenty-First Century*: it does not aim to rethink economic laws, nor to propose a new theory of capitalism. It aims to describe the development of inequalities over the long term and on a global scale with the aid of a few principles that organize the interpretation of the data, namely the generally accepted formula $r > g$ and what Piketty calls the two

12. "The dominant dynamic, which explains most of the concentration of wealth, was an inevitable consequence of the inequality $r > g$." Piketty, *Capital*, 395.

13. *Ibid.*, 353.

14. *Ibid.*, 353–58. The graphs comparing g and r over the long term are based on periods of fifty years, preventing any precise chronological analysis.

fundamental laws of capitalism, $\alpha = r:\beta$ and $\beta = s/g$ (the long-term capital/income ratio is equal to the savings rate divided by the growth rate of the economy). Beyond this, Piketty is essentially occupied with the difficult process of establishing the historical facts—ultimately the only ones that count, since theoretical arguments are not only open to revision and unlikely to shed light on the facts but are also capable of being invalidated by them (which is worse). One major and very powerful empirical observation in itself suffices to sustain his reflection: the economic mechanisms specific to capitalist societies naturally lead to the growth of inequalities in wealth, and the historic reductions of these inequalities are linked to shocks that are exogenous to these mechanisms.

The remarkable trove of findings presented in *Capital in the Twenty-First Century* proves the effectiveness of this approach. It nonetheless raises two types of difficulties, one concerning the differentiated reading of statistical facts and the other its relationship to economic theory.

Identifying Temporalities

Is there a different way of asking questions of the data? Asserting the central role of $r > g$, as Piketty does, is essential to an understanding of the dynamics of capitalism, as we have seen. Neither historians nor economists had previously registered the importance of this observation. The statement constitutes a major stylized fact and therefore legitimately guides the interpretation of the statistics. However, it is also a formalization with an illuminating but partial relation to reality, both in what it elides and in what it asserts. This is not a question of overreliance on such ambitious scales of analysis, which on the contrary should be praised and admired. Social scientists, especially historians, have too readily turned their backs on these ambitious “big pictures.” The global scale opens up a particularly revealing range of comparisons and the long-term view is often indispensable for statistical reasons, since a number of major tendencies are only perceptible over periods of thirty or forty years.¹⁵ Piketty is also attentive to the diversity of the timescales that he strives to examine simultaneously, as seen for example in his analyses of the interwar period.¹⁶ Rather, it is a question of the need to introduce a principle of symmetry, in other words to look as much at the situations in which the reduction, and especially the stability, of inequalities can be observed as those in which they increase.

The temporalities produced by both the accumulation mechanism $r > g$ and the existence of exogenous shocks are, as we have seen, unstable and marked by increases interrupted by sudden falls. The patterns induced by this mechanism, by far the most numerous, are precisely identified by Piketty. Whatever does not fall under or fit neatly into this schema, or, more exactly, whatever does not belong to the same explanatory paradigm, seems to be of less interest to him. To a certain

15. Ibid., 286.

16. Ibid., chaps. 3 and 4.

extent, his second law of capital leads him to a narrow, even essentialist, view of capitalism that leaves little place for its many varieties. In this regard, the post-Second World War period raises certain questions. In some respects it can be understood in terms of the preceding analytical framework, since it shows the same alternation between upward and downward movements in the various measures of wealth or capital. The coefficient β , which measures the relation between capital and national income, is thus characterized over the twentieth century by a “spectacular” U-curve, the ratio being divided almost by three over the period 1914–1950 in France or the United Kingdom, before increasing by more than 100 percent between 1950 and 2012. Likewise, the share of inherited wealth within total French wealth is described by a U-curve starting from a peak in 1910, passing through a minimum around 1970, then heading for a second peak around the 2050s according to plausible forecasts. But other data suggest different perspectives. If one examines the graphs plotting incomes in France and the United States between 1930 and 2010,¹⁷ the most remarkable feature is, on the contrary, stability. How should we read these graphs?

According to the argument of *Capital in the Twenty-First Century*, they should be seen as the long-term consequence of a shock (or rather several successive shocks) of exceptional violence, in which the relatively short space of three decades saw two world wars and a major economic crisis. On the scale of the history of capitalism, this is a unique conjunction which, in its extraordinary violence, caused lasting disruption to the old economic regime of wealth accumulation and distribution, rather like the very long-term economic effects that the ‘Thirty Years’ War had in Germany and Scandinavia during the seventeenth century. The First and, to an even greater degree, the Second World War were characterized by a pronounced compression of the wage hierarchy, a phenomenon that has been well studied, especially in the United States.¹⁸ Above all, the wars led to the almost complete reset of wealth accumulation (not so much through physical destruction as through the devaluation of capital), meaning that wage incomes—structurally less inegalitarian—became more important than rentier incomes for the time it took for capital, and with it the “‘natural’ structure of inequality,”¹⁹ to be reconstituted. By the 2000s, the United States had almost completely returned to its initial levels, thus completing the U-curve (for the top decile of incomes) that began in the 1940s. Europe is on the same track but with a considerable time lag. In both cases, the 1980s were the beginning of a “return to normalcy” and, by the 2000s, “capital [was] back.” From this perspective, the “Thirty Glorious Years”—as the period between 1945 and 1975 is known in France—constitute an exception. They were profoundly original in that during this time the (very high) growth rate was

17. *Ibid.*, 272 and 291.

18. Claudia Goldin and Robert Margo, “The Great Compression: The Wage Structure in the United States at Mid-Century,” *Quarterly Journal of Economics* 107, no. 1 (1992): 1–34.

19. Piketty, *Capital*, 411.

greater than the rate of return on capital. In its scale, this growth matched the destruction that preceded it and reflected the gap that had opened up between continental Europe and its Anglo-American counterparts; once reconstruction was complete and the international technological frontier had been reached, growth returned to the slower rhythm of Britain and the United States, reestablishing the $r > g$ inequality. In Piketty's account of the trade-off between growth rate and the profitability of capital, politics and public action played a relatively small role. As he writes of the postwar decades: "The most one can say is that state intervention did no harm."²⁰ In his view, the profound institutional differences that mark the history of capitalism have little bearing on the production of inequality, and it is for this reason that he regards taxation as the only effective weapon. The political and economic context in which it is employed is not taken into consideration, even though this context is crucial to the conditions of possibility of an aggressive tax policy.

Another interpretation might be suggested, or at least would be worth exploring. This would place less emphasis on long-term dependence on a shock and instead focus on the opposition between two periods—with a turning point around the 1980s—, thus opening up the historical possibility of a regulated capitalism. Let us return to the case of the changing share of the top decile of incomes in the United States over the twentieth century. Beyond the year-on-year variations, we see great stability between 1945 and 1980, followed by a new surge in inequality: by 2000 the top decile received more than 45 percent of national income, whereas twenty years earlier their share had been less than 35 percent. This radical break between a period of fairly stable inequality and another in which it increased dramatically is all the more significant because it is essentially explained by the growing wealth of the top percentile: the share of the upper middle class (the top 10 to 5 percent) remained extremely stable between 1945 and the mid-2000s,²¹ a trend similar to (or indeed more stable than) that of inequality measured on the basis of the top decile in continental Europe.²² The American situation is thus explained by the remarkable enrichment of the wealthiest 1 percent. It is hard not to link this new pattern to the fairly sudden emergence of a finance capitalism at odds with the previous "Fordist and post-Fordist" model, producing a dramatic rise in financial or finance sector-derived incomes, factors which ensure a much better return on capital. One thinks naturally of the anti-inflation policy pursued from October 1979 by Paul Volcker at the head of the Federal Reserve System, with its remarkable consequences for the boom in market finance. From there, the question of the direction of causality arises. Is the emergence of this financial paradigm the consequence of the fact that, together with the continued increase of β , the pure rate of return on capital r once more overtook the growth rate in the 1980s and 1990s (the growth rate of American national income fell by more than

20. Ibid., 99.

21. Ibid., 290.

22. See, for example, the graph for France, *ibid.*, 272, fig. 8.1.

half from the late 1970s)? This interpretation would be in accordance with Piketty's model, but the question can also be inverted to privilege a more historical analysis. Was it, conversely, the emergence of a financial paradigm that favored the rise in r (and therefore the return to $r > g$)?

For Piketty, the stability of inequality in the postwar decades is essentially explained by the combination of a very high American growth rate—which, while lower than continental Europe, still averaged 3.7 percent between 1948 and 1973—and a tax policy less favorable to capital. The two graphs comparing the rate of return on capital and the growth rate at the world level from antiquity clearly show the importance that Piketty places on taxation, since in the first graph (pretax) r is always greater than g , whereas in the second (after tax) r falls below g in the twentieth century.²³ One might, however, wonder whether certain characteristics specific to the period 1930–1980, which some American historians call the “New Deal Order”²⁴ and which retrospectively seems like a long parenthesis in the history of a weakly regulated capitalism, did not contribute to this astonishing stability of inequality. Wage inequality was relatively moderate during this period, and the share of the top percentile of wages in the American wage bill was at the same level in 1980 as it had been in 1945, namely 6 percent (this was favored, it is true, by the “great compression” of wages during the war). The place given to the financial markets was limited, and in general economic actors were more concerned with the medium-term viability of firms than with the profitability of capital, and thus behaved in ways that contrasted with the attitudes predominant since the 1980s.²⁵ All these elements were specific to that period and limited the differences among citizens. These factors, it should be stressed, also favored the formation of very sustained effective demand and therefore growth (the condition for $g > r$), despite the absence of major technological transformations of the kind brought about by the ICT revolution in the last years of the twentieth century.

It is useful to emphasize the opposition between the path that Piketty sets out toward a primarily economic explanation of inequality, produced by the logic of wealth accumulation specific to capitalism, and the emphasis that Paul Krugman places on the role of institutions and the political environment in determining levels of inequality. “Political change ... seems to be at the heart of the story,” writes Krugman, arguing for example that the political transformation which took place in the United States at the end of the 1970s preceded the growth of inequality, or, conversely, that the transition from the inequality of the Gilded Age to the relatively more equal period between the New Deal Era and the late 1970s was

23. *Ibid.*, 354 and 356.

24. See, for example, Steve Fraser and Gary Gerstle, eds., *The Rise and Fall of the New Deal Order, 1930–1980*, (Princeton: Princeton University Press, 1989).

25. See, of course, the following works, which are emblematic of a certain economic philosophy during the years of the New Deal Order: Richard M. Cyert and James G. March, eds., *A Behavioral Theory of the Firm* (Englewood Cliffs: Prentice-Hall, 1963); John K. Galbraith, *The New Industrial State* (Boston: Houghton Mifflin, 1967).

rapid because it was politically willed, along with the creation of “America’s postwar middle-class society,” by the policies of the Roosevelt administration.²⁶

Inequality and the Theory of Distribution

Piketty’s attempt to keep economic theory at arm’s length is thus not without ambiguity. He shows little interest in a kind of knowledge he considers more interested in its own internal coherence than explaining the facts. Such a lucid and honest statement, reinforced by his declaration of attachment to the social sciences, is rare in a discipline that has built its unity on an unquestioning adherence to a number of powerful abstract hypotheses. Piketty’s partial distancing nonetheless raises some questions.

Let us return to the first “fundamental law of capitalism,” $\alpha = r\beta$. This formulation supposes that the share of income from capital depends on the average rate of return and the volume of capital. Piketty’s expression of this is not self-evident: the same accounting identity could be written $r = \alpha/\beta$, making the return on capital the explained variable (as it was for Marx, who considered r to be the central concept and postulated that its decline would be due to the increase of β , though this was never corroborated). However, it is implicitly justified by the fact that r is a variable whose relative stability can be empirically observed over the long term.²⁷ As a result, the share of the income from capital, α , is a direct function of the fluctuations of β , which are themselves ultimately explained by the historical and empirical observation that, in general, $r > g$. An important consequence of the relative stability of r over the long term and, conversely, the variability of β , is that the economic and political problem of inequality thenceforth lies not in the level of profitability of capital but in β .

The variable r is thus a synthetic, even composite index, which has great analytical importance but little historical significance, since it is the aggregation of rates of return that are in fact heterogeneous.²⁸ What do land rent, rent on buildings, treasury bonds, and complex, risky financial assets have in common? The construction of this synthetic variable must first and foremost be seen as a necessary compromise for the sake of an analytical ambition of an unparalleled scale, namely

26. Paul Krugman, *The Conscience of a Liberal: Reclaiming America from the Right* (London: Penguin Books, 2007), 7–9. See also Frank Levy and Peter Temin, “Inequality and Institutions in 20th Century America,” *NBER Working Paper Series* 13106 (2007): <http://www.nber.org/papers/w13106>. This study shows how income distribution in the United States, both before and after 1980, is strongly conditioned by economic institutions. The period between 1945 and the early 1980s was dominated by the many efforts (relating principally but not exclusively to fiscal policy) by governments and trade unions to distribute the benefits of growth in way that was not too unequal.

27. The pure rate of return on capital in France has oscillated around 4 to 6 percent since the early nineteenth century. See Piketty, *Capital*, 202.

28. The rate of return on capital was calculated by adding together all pretax incomes from capital enumerated in the national accounts with the exception of interest on public debt.

establishing a number of historical regularities regarding the evolution of wealth and incomes in more than twenty countries from the eighteenth century to the present. The purpose of constructing r , over and above the different types of investment, is to establish the average yield on capital. Concentrating the information in this way is legitimate given the objectives, but it comes at a price: it makes it impossible to understand the production and transformations of inequality in a precise and localized way, because the returns on capital are historically different in their level and trend. And yet these discrepancies are essential. Moreover, Piketty convincingly demonstrates the significant differentiation between institutions or individuals when it comes to accessing the best ways of increasing the yield on capital. The case of American universities provides an emblematic example of this differentiation because the profitability of assets depends on their volume: the wealthier the university, the higher the return on its investments. This shows the limits of the idea that change in r is in itself an adequate gauge for measuring inequality in financial incomes, especially over the last twenty years. These various observations explain why the problem of distribution (and more generally the theory of distribution), such an enduring concern in classical political economy, is not a central question for Piketty. If the rules of wage and profit formation are not addressed in their own right, his analysis nonetheless frequently refers to the notion of the remuneration of the factors of production according to their marginal productivity. The use that he makes of this idea is measured and prudent, even to the point of sometimes setting it aside. Despite such restrictions, however, it remains the implicit reference of the work when it comes to distribution, confirming Piketty's ambiguous relationship with the core of the neoclassical approach—a mixture of acceptance and distance. It is in fact rarely invoked to explain the variations of r , whose composite character poses a challenge to any explanation based on marginal productivity. It must be emphasized that the absence of a definition of r 's mode of formation and its relative stability over the long term risks naturalizing them, creating the impression that in any economic system there is a kind of natural rate for the return on capital, its fairly limited variations largely explained by the degree of accumulation of capital, β .

The absence of a theory of distribution also generates a further difficulty regarding the role of rent. The problem stems from two very different uses of the term. "Rent" is first and foremost a generic term designating the remuneration of a capital asset. As such, because this remuneration is not justified by any effort or merit, the possessor of a rent incurs Piketty's profound disapproval—all the more so if it comes from inherited capital. He observes that, while the figure of the rentier was socially accepted in Balzac's time (mid-nineteenth-century France was hierarchical and respectful of status), the same is not true in modern democratic societies: "During the twentieth century the word 'rent' became an insult and a rather abusive one. This linguistic change can be observed everywhere."²⁹ This contempt for the fat-cat stockholder and the ineffectual heir is at the heart of

29. Piketty, *Capital*, 423.

Piketty's work, for he believes in merit and its just reward. If Keynes metaphorically wished for the "euthanasia of the rentier" because of this figure's negative impact on the "inducement to invest," Piketty's attitude is more radical—for him it is not so much an economic question as a political and moral one. He believes that the inexorable rise of the rentiers, "enemies of democracy" whose number is set to grow even further as β increases, is a major concern for developed countries today, and he invites us to share his anxieties.

"Rent" also designates the various forms of excess profit created by the imperfections of the market. This aspect is logically of relatively little interest to Piketty, since his subject is the profitability of capital as a whole, whatever the origin of that profitability. The rent-based dimension of the economy is nevertheless crucial, since it is a major source of the valorization of capital (which goes beyond its "legitimate" remuneration in terms of marginal productivity, if one wants to remain within the neoclassical framework), and hence the production of inequality. I am thinking of course in Ricardian terms of raw material monopolies, a theme alluded to in the introduction to Piketty's book, but also of the kind of *de facto* oligopolies that exist in real estate or the information asymmetries to be found, for example, in the financial sector. One could also add—too briefly for such a complex subject—the question of the rents or excess profits generated by dominant market positions resulting from economies of scale or technological innovations, in other words, within a competitive framework.³⁰ Their scale, their repetition, and their generality are such that these elements cannot be described in terms of dysfunction, but must rather be seen as part of the ordinary functioning of capitalism. Piketty observes that the high level of rent (in the general sense of income from a capital asset) is not the consequence of an imperfection in the market, whose excesses could be curbed with more competition, but the consequence of a "pure and perfect" capital market.³¹ Here he identifies a problem of which the dialectical generality was illustrated by the preceding examples: it is the contradictions that manifest themselves within the framework of an ideal (competitive) functioning of capitalism—in terms of excessive inequality or permanent malfunctioning of the market—that pose the major challenges to capitalism itself over the long term.

The notion of marginal productivity is more pertinent in the analysis of wages. What is most surprising is the stability of the wage hierarchy from the end of the Second World War to the 1990s and 2000s, followed by the abandonment of this wage model—very pronounced in the United States and somewhat less so in France, despite changes that are beginning to be felt. The explanation that Piketty seems to favor is that before the 1990s the remuneration of labor was based on a hierarchy of merits inscribed in a widely accepted normative system, with wages roughly corresponding to marginal productivity. Egalitarian in its own way (the

30. *Ibid.*, 444–45. Piketty refers to Bill Gates, whose fortune is due not so much to his technological boldness as to the dominant position secured by Microsoft in the software market. For Piketty, this is a good example of the malfunctioning of the principle of marginal productivity.

31. *Ibid.*, 27 and 423.

spectrum of wages was even narrower in the United States than in France), this mechanism was subsequently replaced by a very strong growth in wage inequality, which was particularly spectacular in the United States. This was largely brought about by changes in the financial sector, but other sectors also adjusted to this new way of setting wages (though to a lesser extent). How is such a sudden change to be explained?

An interpretation that remained within the standard framework predominantly used by economists, following the rationale of the neoclassical theory of productivity, might point to globalization, the opening up of international trade automatically increasing inequality in the distribution of incomes. It would above all refer to technical progress, which benefits the most highly skilled and widens the disparity between the wages of the more and the less competent. However, the fact that disparities in income are conspicuous even within the sections of the population that are most highly skilled and best adapted to the needs of the market means that these explanations appear insufficient. Piketty is therefore right to consider that the notion of the remuneration of labor according to its marginal productivity no longer applies. It is hard to believe that the productivity of certain categories of employees, from financial traders to the CEOs of big corporations, has increased commensurate to their salaries, which have risen five or even ten times faster than the average. As before, an approach focused on dominant positions as well as controlled and restricted access to labor markets—similar to those observed for the remuneration of the most valorized capital—would probably offer a more effective explanation for these recent developments. Piketty evokes a shift from a meritocratic society, corresponding to a certain moral economy of wages based on the contribution of each individual to the production of wealth and measured by his or her marginal productivity, to a “meritocratic extremism.” The notion itself is not clearly formulated, but it does convey the emergence of a system of wages that is perceived as unjust and even indecent. Two questions relating to the coherence of *Capital in the Twenty-First Century* then arise.

How can an economic concept as central as marginal productivity be regarded as (more or less) valid for a given historical period and then, later, lose all relevance? We know that some economic mechanisms have a limited historical validity; this is true, for example, of the Phillips curve linking unemployment to inflation, which was corroborated until the early 1970s but not thereafter. If this were the case here, it would be necessary to consider the hypothesis of a change in the capitalist regime, though this is not the perspective adopted in *Capital in the Twenty-First Century*. What is more, this approach would only be partially adequate, for, like the principle of the remuneration of factors according to their marginal productivity, it is not a matter of verifying the validity of a simple correlation but of testing a fundamental theoretical principle.

If the transition from one world of wage distribution to another has been socially acceptable, it must mean, Piketty suggests, that norms regarding the distribution of income have also changed. More precisely, he proposes that social

tolerance of inequality in terms of fortunes was partly replaced, from the early 2000s and especially in the United States, by a tolerance for large inequalities in wages.³² This is a useful point, but at this stage in the argument it seems somewhat ad hoc. Apart from the fact that it leaves unanswered the crucial question of how added value is distributed and how wages are formed, it introduces a new and hitherto undiscussed element. The social representation of inequalities was not taken into account in their original development, which depended on a mechanism largely internal to the economy (such as variations in β or in marginal productivity). Nevertheless, opening up the economic argument to questions drawn from the social sciences is not only in keeping with the author's declared ambition but also necessary, for it is essential to any reflection on the progressive transformation of society and its values that has been accomplished by capitalism. This is the key to understanding that the degree of inequality observed in a given society also depends on the degree to which that society accepts inequality.

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