Neoliberal Managerial Capitalism:
Another Reading of Piketty's, Saez's, and Zucman's Data

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ABSTRACT:

The paper first documents income and wealth inequalities since World War I in the United States, a pattern in three stages, with a reduction of inequality since the Great Depression from the high pre-depression levels, stagnation at diminished levels up to 1980, and a dramatic restoration in neoliberalism. Underlying these three phases, we show the continuous transformation of the composition of the income of the top 1 percent to the benefit of "wages", testifying to the progress of the managerial aspect of relations of production. These trends manifest the on-going transition toward managerialism, a post-capitalist mode of production with managers as upper class. In the hybrid social formation of managerial capitalism, a tripolar class pattern prevails, namely, capitalists, managers, and popular classes. The three subperiods are interpreted in relation to the configuration (in social orders) of class dominations and alliances, in the first financial hegemony (domination of capitalist classes in alliance with managers, to the right), the post-depression and postwar compromise (alliance between managers and popular classes, to the left), and the second financial hegemony in neoliberalism (alliance between capitalists and managers, to the right). The work of econophysicists allows for an endogenous determination of class patterns and confirms the new traits of neoliberalism.

KEYWORDS: managerial capitalism, classes, income and wealth inequalities, social orders, neoliberalism.

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The object of the present study is the presentation of our own reading of the broad set of data put forward by Thomas Piketty, Emmanuel Saez, and Gabriel Zucman. When Piketty and Saez made tax data available to researchers, we understood these data were clearly supportive of our historical analysis and began to make a broad use of the series. The publication of *Capital in the Twenty-First Century* led us to further investigate the framework of analysis of Piketty, with a fresh look at the data and interpretations. A new important piece is now Saez's and Zucman's *Wealth Inequality in the United States since 1913 - Evidence from Capitalized Income Tax Data* (Saez and Zucman 2014), which provides helpful renewed information concerning wealth estimates even more in line with our own interpretations. (The main change is the correction of Piketty's estimates of wealth inequality at the top of wealth hierarchies.)

We will not return here to the analysis of Piketty's *Capital*—the description of historical trends and the mechanisms allegedly accounting for these trends—to which we devoted three earlier studies (Duménil and Lévy 2014b, 2014c, 2014d). The paper focuses on the new light Piketty's, Saez's, and Zucman's (PSZ) data shade on the historical transformations of U.S. capitalism and the most recent trends in neoliberalism, the new phase in which capitalism entered in the late 1970s or early 1980s. (We abstract from other countries, such as France or Germany, where the profiles of evolution are distinct.)

A central element in our understanding of the historical dynamics of capitalist economies is the observation of the gradual transformation (since the early 20^{th} century) of capitalist relations of production into managerial relations. By "managers", we refer to a broadly defined social category of wage earners involved in the organization of corporations. They play a crucial role in decision making, with a clear line of command. Various functional sub-categories can be distinguished depending on their technical, financial, commercial, or more general field of activity. To this, one must add officials within government institutions. We contend that managers will finally become the new upper class in a post-capitalist mode of production. We denote this new mode of production as "managerialism" (in French "cadrisme"). The hybrid social formation typical of contemporary societies can be denoted as "managerial capitalism". In the remainder of this study, we will not explicitly refer to our earlier work. (Recent contributions are Duménil and Lévy 2011, 2014a.) Basic notions and historical interpretations are briefly recalled.

There is a clear link between this reference to managerial features in our work and Piketty's analysis, as a strong emphasis is also placed on managers in *Capital in the Twenty-First Century*. But Piketty never enters into the analysis of the possible transformation of relations of production. The combination of our analysis of neoliberal capitalism in reference to capitalist classes and our managerial hypothesis led us to interpret neoliberalism as the expression of an alliance between capitalist and managerial classes in the transition toward managerial relations of production along a path in which the interest of upper classes would be jointly protected from the threat of popular struggle.

The study divides into five sections. Section I documents the comeback of "upper classes" (independently of the distinction between capitalists and managers) in the hierarchies of income and wealth. Section II introduces the secular component of our analysis of the transformation of relations of production within managerial capitalism. Section III is devoted to the empirical investigation of the rise of wages toward the upper fractions of the income pyramid. Section IV introduces our periodization of managerial capitalism into three "social orders". Section V concludes concerning the nature of "neoliberal managerial capitalism". An appendix is devoted to the work of econophysicists on income distribution that strikingly supports basic aspects of the analysis in the main sections of the paper.

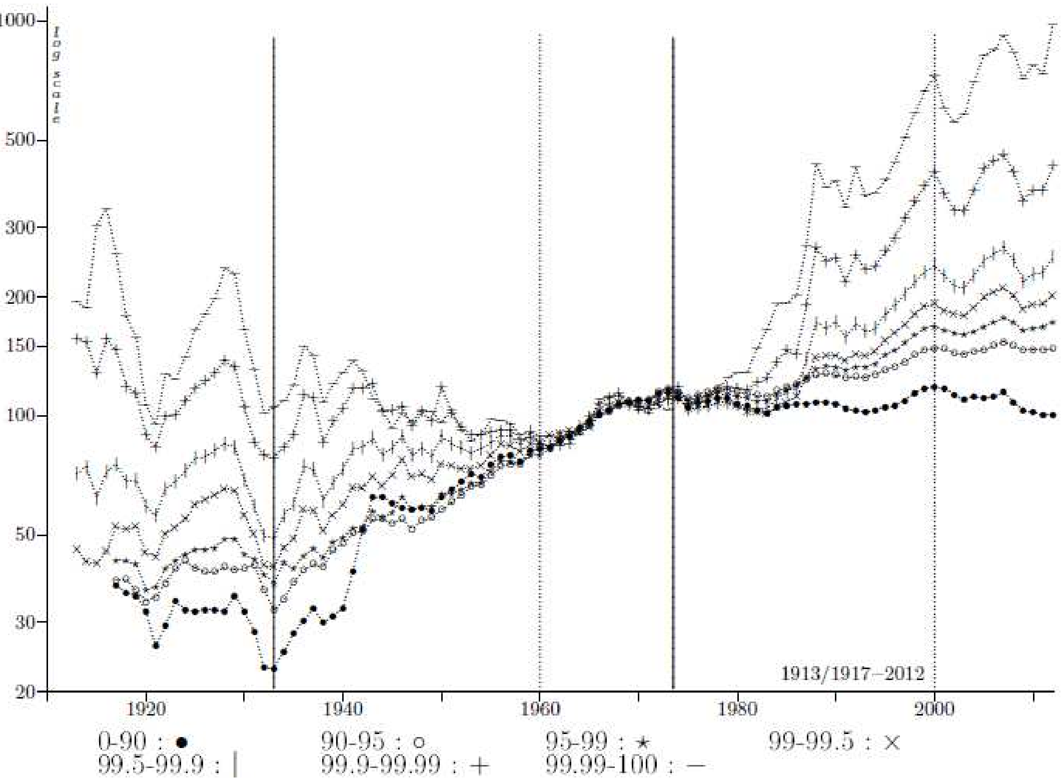
I. The decline and comeback of upper classes

Like many other analysts of contemporary economies, we refer to the latter decades as the "neoliberal" phase of capitalism, a term that Piketty never uses in his *Capital*. (Reference is made to the "conservative revolution" though quite secondarily.) In the mid-1990s, the current interpretation of on-going trends emphasized the "liberal" aspect of neoliberalism, that is, the return to market mechanisms, nationally and internationally, as opposed to the intervention of the state, what we would describe as the "methods" of neoliberalism or merely "neoliberal ideology"—actually a mix of the two. This is when we put forward a class interpretation of neoliberalism as a new phase of capitalism whose main objective was the "restoration" and increase of the income and wealth of upper classes, in which we originally saw capitalist classes in alliance with top managers. Underlying the notion of restoration, was the reference to a historical profile made up of three phases, namely a decline from high levels of inequality (of income and wealth) prevailing prior to the Great Depression, the prevalence of diminished levels during an intermediate period and, finally, the return toward high, or even increased, levels during the period of neoliberal capitalism.

The reference to capitalist classes is always ambiguous due to the broad hierarchy inherent in capitalist relations of production, from upper capitalist families to the small owners of the means of production such as shopkeepers or craftsmen. We, therefore, coined the notion of "Finance" to refer to the upper fractions of capitalist classes and *their* financial institutions, since much of the power of capitalist classes is embodied within financial institutions (Section V.2). Another source of difficulty is the porous character of class boundaries as members of capitalist families are also involved in upper management and hold government offices.

It is easy to locate quantitative expressions, in PSZ's data, of the rise of the income and wealth at the top of social hierarchies in the United States. We distinguish between 7 groups (without overlap) in the overall hierarchy of income: (1) the bulk of households in the fractile 0-90 (that is, between 0 and 90 percent in the income pyramid), and (2) the breakdown of the upper decile (the top 10 percent) into 6 categories, as summarized in Table 1. (Note that the households that form each fractile according to distinct criteria such as total income, wealth, or wages are not necessarily the same households.)

Figure 1 – Average yearly income per household in seven fractiles (constant dollars, 1960-1973=100)
(All figures are for the United States)



Source: Piketty and Saez 2003, Table A4: *Top fractiles income levels (excluding capital gains)*.

Table 1 - Income and wealth hierarchies among households: Seven fractiles as of 2012							
Fractile	0-90	90-95	95-99	99-99.5	99.5-99.9	99.9-99.99	99.99-100
Fraction of all households	90 %	5 %	4 %	0.5 %	0.4 %	0.09 %	0.01 %
Number of households (1000)	144 613	8 034	6 427	803	643	145	16
Average yearly income of the group (1000 $)	31	134	226	478	970	3 661	30 786
Average Wealth of the group (1000 $)	84	1 310		7 290		39 700	371 000
Sources: Piketty and Saez 2003, and Saez and Zucman 2014.							

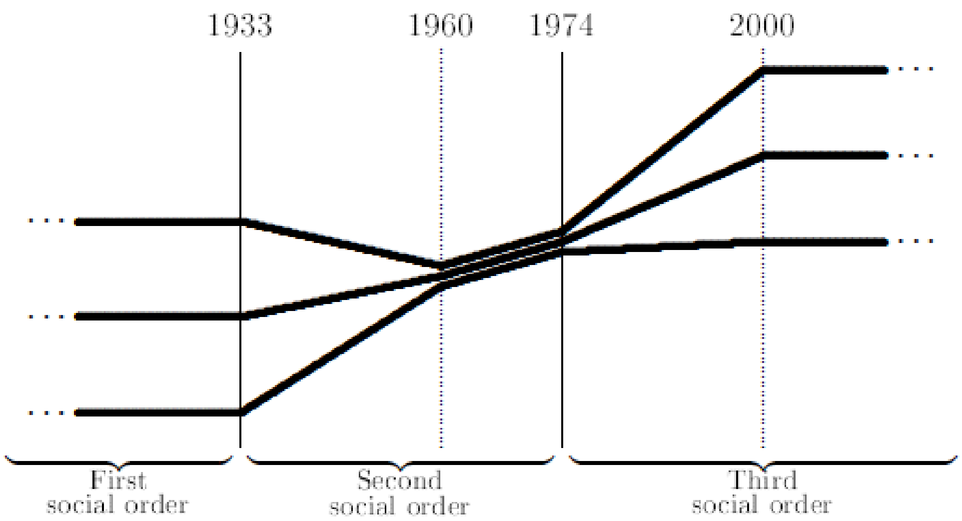


Figure 1 shows the average yearly pre-tax income in constant purchasing power *per* household in each fractile since World War I in the United States. A logarithmic scale is used on the vertical axis to provide a clearer view of growth rates, and all variables have been rescaled to 100 for the average of the period 1960-1973. The vertical continuous lines in 1933 and 1974 separate three basic periods, and the dotted lines (respectively in 1960 and 2000) distinguish between two sub-periods within the second and third periods. (See the accompanying diagram.)

We denote the three basic periods, as schematically represented in the diagram, as "social orders" (a notion to be more precisely defined below):

1) *Prior to the New Deal.* A first pattern of income inequality is observed.

2) *From the New Deal to the mid-1970s.* In the wake of the New Deal a new trend was established with the gradual reduction of inequality to about 1960, a basic feature of the first sub-period in this second social order. Table 2 compares the purchasing powers of the various fractiles in 1960 to their average values prior to 1929. The contrast is sharp between the upper fractile (a division by 2 of its average purchasing power) and the fractile 0-90, a multiplication by 2.5.

Table 2 – Comparing purchasing powers: 1960 / Average prior to 1929

0-90	90-95	95-99	99-99.5	99.5-99.9	99.9-99.99	99.99-100
2.53	2.13	1.83	1.63	1.18	0.69	0.47

Source: Piketty and Saez 2003, Table A4: *Top fractiles income levels excluding capital gains*.

Then, during the second sub-period, the purchasing powers of all groups grew at similar rates from the early 1960s up to the mid-1970s or early 1980s.

3) *From the 1970s or 1980s onward.* A new dramatic diverging pattern of evolution is then observed, with the hike of high incomes. The purchasing power of the top fractiles skyrocketed, while the purchasing power of the 0-90 stagnated. After 2000, during the second sub-period, a new hierarchy had been established along a rather stable pattern. Still comparing the top and lower fractiles in Table 3, one will observe the dramatic divergence between the two groups, with the purchasing power of the fractile 0-90 stagnating and a multiplication by more than 7 for the top fractile.

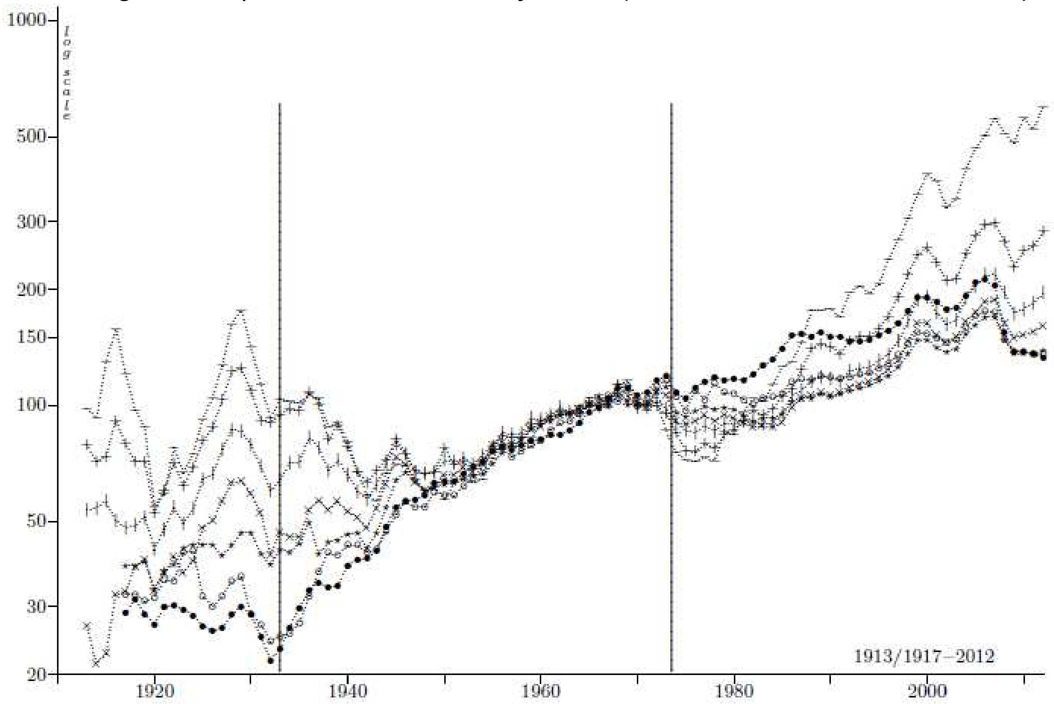
Table 3 – Comparing purchasing powers: Average since 2000 / 1973

0-90	90-95	95-99	99-99.5	99.5-99.9	99.9-99.99	99.99-100
0.95	1.26	1.43	1.72	2.14	3.55	7.27

Source: Piketty and Saez, 2003, Table A4: *Top fractiles income levels excluding capital gains*.

Figure 2 repeats the same investigation concerning the inequality of wealth. The variable is the average wealth of one household in each fractile in constant purchasing power. The same three periods are clearly apparent. Again, despite important fluctuations, the wealth of the three upper fractiles remained approximately constant up to the New Deal, when the degrees of inequality began to diminish and stabilized at comparatively lower levels during the 1950s (apparently earlier than for income trends). The parallelism typical of the 1960s was maintained up to 1973, when the structural crisis of the 1970s began. With the fall of stock market indices, all wealth stocks (as measured in purchasing powers) diminished during the crisis, in particular for the upper fractiles. (For example, between 1972 and 1975, the fall amounted to 29 percent for the fractile 99.99-100.) Then, the new upward trend was established as typical of the third social order.

Figure 2 – Average wealth per household in seven fractiles (constant dollars, 1960-1973=100)



Source: Saez and Zucman 2014, Tables: *Top wealth shares, estimates obtained by capitalizing income* and *Household wealth as a fraction of national income*.

Table 4 – Yearly average income and wealth levels (1000 $ of 2012)

Fractile	0-90	90-95	95-99	99-99.5	99.5-99.9	99.9-99.99	99.99-100
Incomes							
Before 1929	10	35	55	115	239	798	4 176
1967-1970	32	95	135	233	358	711	2 401
Since 2 000	33	131	212	424	785	2 532	16 621
Wealth							
Before 1929	19	219	575	1 250	3 215	11 776	67 811
1967-1970	71	671	1 441	3 246	5 767	15 498	69 716
Since 2 000	113	971	2 090	5 071	10 416	37 376	301 932

Sources: Piketty and Saez 2003, and Saez and Zucman 2014.

The emphasis in the present section is on secular trajectories and the distinction between the three social orders but, underlying these trends, are obviously dramatic differences in levels as stated in Table 4 for the two variables, incomes and wealth. One can observe, for example, that the ratios between the top fractile and the 0-90 were of the same orders of magnitude (respectively ratios of 423 and 502) prior to the depression and since 2000. It is also noteworthy that the stable pattern of income inequality during the second half (1960-1973) of the second social order was still wide-open despite the earlier contraction, the ratio between the top fractile and the 0-90 amounting to "only" 73, at a considerable distance from what could be expected of a truly "egalitarian" society though little in comparison to the gaps found above prior to the depression and since 2000. One should, in addition, keep in mind that these measurements do not incorporate the effects of the "confiscatory" tax rates of high incomes after World War II. No measure of the after-tax income of households is available for the various fractiles. One can surmise, however, that the reduction of inequality was much larger.

A similar investigation can be made concerning wealth inequality, in the lower part of the table, with an even broader spectrum from 71 to 69 716 (a ratio of 982) during the intermediate period, and the surge of wealth inequality from 113 to 301 932 after 2000 (a ratio of 2 671). (It is well known that wealth inequality is much larger than income inequality.)

II. Relations of production and class patterns

More than three centuries of history are covered by Piketty's investigation from 1700 to 2010. In France, for example, we move from the *Ancien Régime*, in which landowners were still the dominant fraction of upper classes—with a class of small manufacturers slowly developing but still no industrial revolution—to contemporary neoliberal capitalism. (It might be useful to recall that Louis the 14th died in 1715.) Even in England, the country of the early industrial revolution, the capitalist features of the economy were only gradually asserted during the 18th century. Moving forward, one could be content with the observation that the 19th century can be characterized by the domination of capitalist relations of production. A difficulty is, however, that, reaching the late 19th century and early 20th century, the managerial features of the societies and economies were on the course of being established, notably with the managerial revolution in the United States, in the context created by the corporate revolution and the emergence of new financial institutions involved in the financing of corporations. Within the new large corporations, the tasks of capitalists were delegated to salaried employees. Overall, relations of production are in constant evolution and modes of production overlap within complex hybrid configurations. Are the trends observed since the 1980s to the present the expressions of the reassertion of those prevailing during the one or two centuries that preceded World War I as Piketty contends? We have serious doubts. The historical dynamics of wealth and inequality cannot be interpreted as a grand historical law of evolution of "capitalism" across centuries as Piketty does, independently of the underlying changing configurations of relations of production and class patterns. The whole framework of income distribution underwent continuous transformations.

Our reading of the tendencies apparent in PSZ's income and wealth data is based on what we denote as our "managerial hypothesis". The *fundamentalist* Marxist component is the belief that the dynamics of productive forces and relations of production in combination with class struggle are still the engine of change in contemporary societies. The *revisionist* aspect is the contention that these dynamics may lead to the establishment of a new class society in which the upper class would be the managers of the private and government sectors, not necessarily a form of "socialism" whatever the exact content given to the notion.

The trends toward the new mode of production are clearly expressed in the historical transformation of contemporary societies and economies since the early 20th century in "managerial capitalism"—a hybrid society in which the capitalist and managerial traits are combined. Concerning specifically incomes, wages are gradually substituted for capital income within the total income of upper classes as a channel of appropriation of surplus-labor (see Figure 3 below). These changing historical configurations find a straightforward echo in class patterns. The threefold pattern *Capitalists-Managers (of the private and public sectors)-Popular classes* was gradually substituted for the dual class pattern *Capitalist class-Proletarian class* typical of capitalism in the abstract. As segments of the new class of managers reaches the upper strata of class hierarchies, their designation as a new middle class becomes less and less relevant. [1]

[1] The managerial features of capitalism have been noted long ago, notably by Marx pointing to the delegation of the tasks of active capitalists to salaried managers in *Capital, Volume III*, Ch 23 (Marx 1981). (See Duménil 1975). The separation between ownership and management was a crucial aspect of Veblen's analysis of the leisure class (Veblen 1924 and other well-known books). The phrase "Managerial revolution" can be found in James Burnham's 1941 book (Burnham 1945). Well-known references are also Berle and Means 1932, and Berle 1960. Reference must also be made to John Kenneth Galbraith's "technostructure" (Galbraith 1967) and Chandler 1977.

We will not return here to the presentations we gave in other works of this historical evolution toward managerial capitalism during the 20th century or the discussion of alternative interpretations. Managers are not simply (as in the traditional capitalist-proletarian dual scheme) the upper segment of a single class of wage earners, in a fundamentally unaltered relationship to capitalist owners, though better paid due to their tight cooperation with capitalist classes; they are not particular fractions of capitalist classes receiving their share of profits under the form of wages.

Within contemporary societies, in particular in the United States and the United Kingdom, the social nature of the *channels* governing income distribution is difficult to pin down. But the basic features of what a class society implies for the lower fractions of the population are still there and, more than ever, namely high levels of wealth as well as income inequality—including both capital income and wage income—and their upward trends to the benefit of managerial-capitalist upper classes.[2]

Such configurations are evocative of the transition between the society of the *Ancien Régime* (already beyond feudal relations of production) and capitalist relations of production. A form of merger occurred at the top of social hierarchies, with a nobility gradually more involved in the capitalist exploitation of its land (a class of landowners) or business endeavors (as in foreign trade or mining), and the new class of capitalists purchasing land and building mansions in search of a symbiosis with the earlier ruling class.

Returning to contemporary societies, the political consequences are of major importance. The main point can be very briefly sketched as follows. Only the forces of class struggle may command a "bifurcation" from on-going trends[3], leading to the establishment of a trajectory in which popular classes could assume an actual leadership as in Marx's and other's prospects concerning the emancipation of workers. History continued and still continues its own course independently of the failure of popular classes to impose a new society in the first half of the 20st century. Besides the struggle against traditional capitalist classes, popular classes must confront the rising forms of class domination (power and income) inherent in the internal polarization of wage earners, where the new managerial relation is expressed; they must block and redirect a continuing trajectory of evolution of relations of production perpetuating exploitation beyond capitalism itself, to, finally, impose a new trajectory of progress and emancipation.

III. Wages *toward* and *at* the top

The main thesis in the present section is that high wages gradually become the main channel in the concentration of income to the benefit of the upper layers of the income pyramid besides the small sphere of rather unambiguously defined capitalist classes.

We distinguish between two fractiles (without overlap) among U.S. households ranked by income levels: (1) the top 1 percent; and (2) the fractile 90-99, that is, the top 10 percent excluding the previous fractile. The variable in Figure 3 is the ratio of wages (including pensions, bonuses, stock-option exercises, etc.) to the sum of wages and capital income (dividends, interest, and rents) within each fractile. (We abstract here from the existence of mixed income, such as entrepreneurial income, which amounts to an almost constant fraction of the income of households since World War II.)

As expected, the fractile 90-99 earns almost only wages (and benefits), including during neoliberal decades. Conversely, the trend observed for the 1 percent is particularly telling of historical tendencies. To a large extent, the top percentile was still a basically capitalist class in the early 20th century with 60 percent of its income in the form of capital income. In a steady fashion, the share of capital income declined from 60 percent to less than 20 percent, while the share of wages rose from

[2] One additional difficulty is that not only the twofold social position of the upper classes accounts for the problems met in the identification of class boundaries. As is well known, within the countries of Anglo-Saxon neoliberalism, considerable masses of financial assets are held within pension and mutual funds and benefit to rather broad fractions of the populations (mostly within the fractile 50-90). A comparison between Piketty data and U.S. National accounts shows that significant flows of capital income are garnered by fractions of the population that do not belong to upper classes.

[3] This is a key thesis in Duménil and Lévy 2014a.

40 percent to more than 80 percent, dramatically manifesting the secular comparative rise of wages. We see in this upward trend a feature of managerial capitalism typical of the 20th century, namely the constant rise of upper wage earners toward the top of income hierarchies.

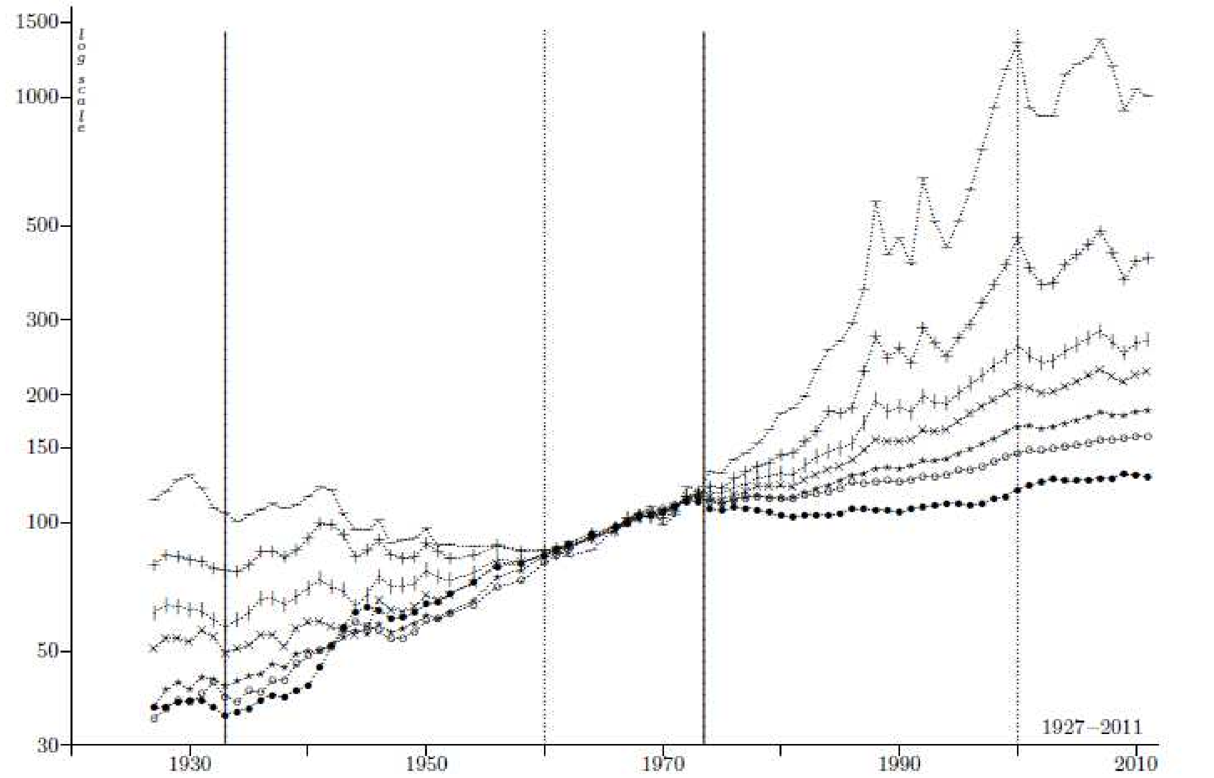
Figure 3 – The ratio of wages to the sum of wages and capital income within the fractiles 90-99 and 99-100 (percent).

Capital income is the sum of dividends, interest, and rents. Abstraction is made of capital gains, as they are at the origin of excessive fluctuations that blur underlying trends and do not fundamentally modify the overall pattern. Source: Piketty and Saez 2003, Table A7: *Income composition by sources of income and by fractiles of total income in the United States.*

The internal dynamics of the various layers of wages is also telling. Figure 4 is built on the same model as Figure 1 but the variable is the average wage instead of the average total income within each fractile (in constant purchasing power). The three same periods previously identified in the analysis of income and wealth are again revealed, and very neatly so:

1. One can first recognize the rather stable pattern up to the New Deal.
2. New trends were then established with a spectacular decline of wage inequality, as all series converged to identical growth rates in the 1960s. One can even notice that the purchasing power of top wages actually declined till the 1960s. The pattern of wage inequality then stabilized up to the 1970s.
3. The 1970s opened a third phase with the dramatic dilatation of inequality, the image being that of a gradual fan-shape opening, symmetrical to the earlier closing one (though the widening of wage inequality was initiated somewhat earlier than the divergences of total income or wealth in Figures 1 and 2).

Figure 4 – Average wages per household in seven fractiles (constant dollars, 1960-1973=100)



Source:Piketty and Saez, 2003, Table B3: *Average salary and threshold for each fractile (in latest year dollars).*

Table 4 provides the average wage levels for the various fractiles during the three periods. As in Table 3, broad discrepancies in purchasing powers still prevailed during the intermediate period, but almost nothing compared to wage inequality prior to the Great Depression and since 2000. (After 2000, the real wage of the fractile 0-90 rose slightly more than 20 percent, from $38,000 to $46,000, while average wages at the top increased 10 times.)

Table 4 – Yearly average wages (1000 $ of 2012)

Fractile	0-90	90-95	95-99	99-99.5	99.5-99.9	99.9-99.99	99.99-100
Before 1929	14	32	46	89	152	356	1 186
1967-1970	38	91	119	176	250	445	1 032
Since 2000	46	134	202	366	625	1 802	10 932

Source: Piketty and Saez 2003, *Table B3: Average salary and threshold for each fractile (in latest year dollars).*

IV. Three social orders

This section prolongs the presentation of our historical framework of analysis as in Section II, showing how the introduction of the threefold class pattern allows for a political interpretation of the succession of the three social orders identified in the previous sections. These social orders actually refer to specific configurations of the hierarchies of dominations among the three classes of managerial capitalism and the patterns of alliance:

1. From the three revolutions in the institutions of capitalism—the corporate, the financial, and the managerial revolutions in the early 20th century—up until the Great Depression, the

domination of capitalist classes was well established, an alliance *to the right* with the rising new managerial classes with the large degrees of inequality during the first period described in Figures 1, 2, and 4.

2. In the political context created by the advance of the worker movement worldwide, the Great Depression and World War II led to the formation of a social order based on an alliance between managerial and popular classes, an alliance *to the left* in which the privileges of capitalist classes and upper management were dramatically diminished. Given the threat posed by the success of the worker movement in other countries and the popular struggle within the country itself, popular classes were able to impose more progressive social configurations. A new "social-democratic" or "Keynesian" social order was established under the leadership of managerial classes in alliance with popular classes, with an important role played by government officials, as was the case with the New Deal.[4] The sequence of two sub-periods is observed with, first, the gradual reduction of inequality (between the New Deal and the end of the 1950s), and the perpetuation of these low levels (from the 1960s to the mid- 1970s).

3. A new *alliance to the right* between capitalist and managerial classes was formed during the 1970s, which succeeded in the advent of neoliberalism in the 1980s, with the sharp rise of inequality, at least up to 2000. Several among the features of neoliberal capitalism had been implemented earlier, for example free trade and the free international movements of capital but, at the end of 1979, the decision of the Federal Reserve to increase interest rates to any levels allegedly required to tame inflationary trends can be used to date the entrance into the phase in the United States and other advanced countries. The figures of Margaret Thatcher and Ronald Reagan are emblematic of the establishment of the new course of events. The management of corporations and policies were radically transformed.

   Both economic and political circumstances allowed for the transition. The crisis of the 1970s (with notably the wave of inflation) created favorable circumstances. The establishment of neoliberalism must, however, be understood as the outcome of an episode of class struggle in which upper classes had the edge. The failure of the great historical project of emancipation of popular classes in the countries of "self-proclaimed socialism" played a crucial role, supporting the parallel erosion of social democratic trends.

Thus, the three phases apparent in the profile of the income and wealth of capitalist classes in Figure 1, 2, and 4 must be interpreted as quantitative manifestations of the three social orders—periods of thirty or forty years, with specific political configurations and lasting institutional and policy traits—as noted above: (1) the high concentration of income and wealth to the benefit of upper classes up to the Great Depression; (2) the "financial repression" during the intermediate period; and (3) the return of upper classes with the establishment of neoliberalism. The contrast is sharp between this reading of history centered on the transformation of relations of production, class patterns, class struggle, and social orders, and the interpretation in Piketty's *Capital*, based on "shocks", namely the two world wars and the Great Depression.

As in Section II with respect to relations of production, the implications of the analysis of class dominations, alliances, and struggles concerning contemporary politics are of major importance. Although popular classes must confront the gradual establishment of the managerial forms of domination and exploitation in the new relations of production, on the agenda is now the struggle against the compromise at the top of social hierarchies, with its class and international components as in Anglo-Saxon managerial-capitalist neoliberalism.[5]

[4] Not only social welfare is involved, also the leadership of managers. One should remember that the United States in the 1960s was the country of Galbraith's technostructure.

[5] This is also a central thesis in Duménil and Lévy 2014a.

V. Merger and alliance at the top

The observations in the previous sections shed new light on historical dynamics in two respects: (1) the transformation of relations of production and class patterns, with the continuous rise of wages toward the top; and (2) the social-political nature of the successive social orders, with the sequence of high, diminishing and low, and rising and high inequality—the image of the variegated outcomes of class struggle. All combinations between the two categories of mechanisms are a priori possible, as the continuous transformation of relations of production does not imply any specific trend concerning inequality. The reduction of inequality in the second phase occurred as the managerial component of relations of production had already reached advanced degrees. Specifically managerial forms of inequality, as in the opening hierarchy of wages, were later established, as the managerial trends were continuing their movement forward. During this third phase, managerial and capitalist forms of inequality combined their effects.

1. The income mix

Figure 5 shows the share (in percentage points) of total income that accrues to the top fractile, the 99.99-100 in the hierarchy of income, and breaks down this total into three components: (1) capital income, (2) entrepreneurial income, and (3) wages. The profiles observed are distinct for each of the four components:

1) *Total.* A first observation is that Figure 5 confirms the specific features of the three phases, with the spectacular decline during the first years of the second period as well as the also dramatic recovery during the third phase. At the end of the period, the concentration of income to the benefit of the fractile reached levels significantly larger than those attained during the 1920s (3 compared to 2 percent).

2) *Capital income.* Up to the New Deal, the top fractile could be straightforwardly labeled a "capitalist class", with the bulk of its income being capital income. A significant recovery of capital income occurred at the end of the period (though lately), but compared to the situation prevailing during the early 20th century, the rise remains modest.

3) *Entrepreneurial income.* During the intermediate period of diminishing and diminished inequality, entrepreneurial income was reduced to very low levels. A dramatic upward trend was then established during neoliberal years. The members of this top fractile are not small entrepreneurs; they did not suddenly discover the beauties of small business in the early 1980s. The rise of entrepreneurial income in neoliberalism actually reflects the rise of the income of S-corporations (entities not subject to corporate taxes and taxed only at the individual level), the new form of capital income.

4) *Wages.* Last but not least, in contemporary managerial capitalism, not only wages *rose* toward the top as in Figure 3, they finally *reached* the top, and account for about one third of the income of the best-off households.

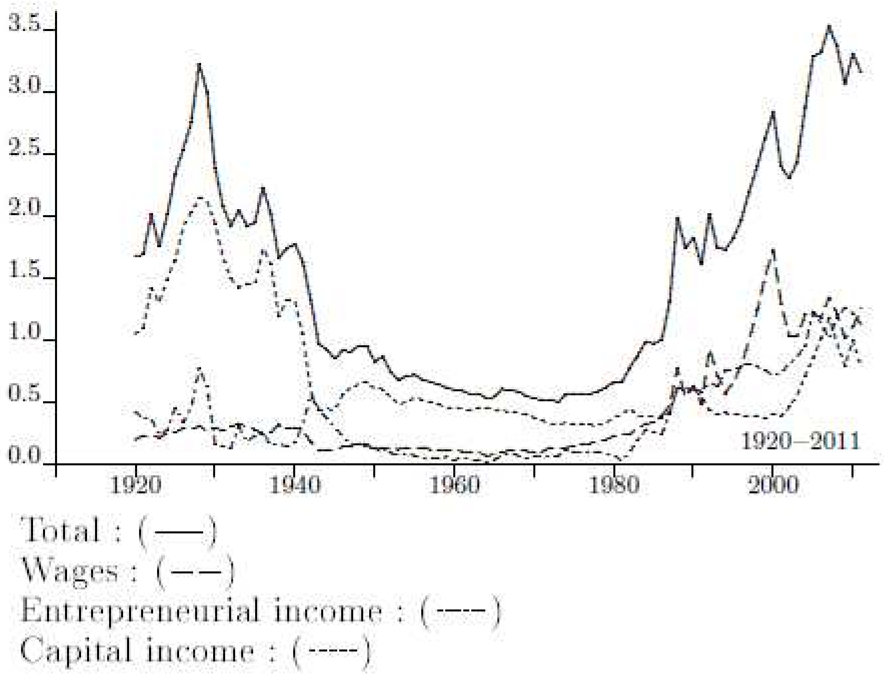
The rise of wages within this group testifies to the hybrid nature of class dominations in contemporary societies. In at least two respects, Figure 4 suggests that these upper wages are components of overall managerial wage dynamics and should not be singled out as qualitatively different from lower fractions:

1) Like lower categories of wages, the wages of the top fractile, 99.99-100, were part of the decline of inequality between the New Deal and the end of the 1950s. Then, the first steps in their upward trend were accomplished during the 1970s jointly with the wages of the other lower components of managements. The same social forces are underway.

2) The same dynamics of gradual opening of hierarchies during the latter decades is involved at the top as for lower fractions—from the bottom to the summit of the hierarchy of wages.

Overall, we do not see any empirical foundations justifying a qualitatively distinct treatment.

Figure 5 – The share of the total income of the fractile 99.99-100 and their three components in the total income of households (percent)



Source: Piketty and Saez 2003, Table A7: *Income composition by sources of income and by fractiles of total income in the United States.*

The configuration observed for the top fractile 99.99-100 are still evident when broader groups are considered, notably the fractile just below, the 99.9-99.99. (These two fractiles jointly form the top 1/1 000th of all households, 161 000 households.) In this second layer, wages account for about half of total income in the later observations, a larger percentage than for the 99.99-100 as could be expected, but capital income is still largely involved.

The dual nature of relations of production is here manifest and difficult to decipher. On the one hand, these groups can be classified as capitalist owners; on the other hand, they are part of broader overall managerial dynamics. The amazing wages they receive is also a major source of capital accumulation and, symmetrically, their social status as owners can also be one of the foundations of their position in the hierarchies of management.

2. Ownership, control, and income

Recent studies provide important information concerning the architecture of the network of large financial institutions that governs the overall system of transnational corporations worldwide (Vitali, Glattfelder, and Battiston 2011; and Vitali and Battiston 2013). They shed considerable light on the institutions of what we denote as the "interface between ownership and management", with its contemporary capitalist-managerial dual facets, whose privileges are finally expressed in the income and wealth of top fractiles.

These large financial institutions are interconnected within a tight network of reciprocal ownership. In other works, we described this institutional framework as typical of "Anglo-Saxon neoliberalism", since it is largely dominated by U.S. and U.K. institutions. A more appropriate phrase would be "Anglo-Saxon managerial-capitalist neoliberalism". Three components of the complex of capitalist and managerial aspects are noteworthy:

1) The whole system unquestionably works to impose the rules of neoliberal capitalist ownership on transnational corporations, namely "sufficient" returns on own funds and performances on the stock market to the benefit of shareholders. These institutions reciprocally hold (as owners or asset managers) sufficient amounts of stock shares of one

another. It seems difficult to refer to a pattern of "competition" among them. They actually cooperate to impose an intense level of competition between other corporations.

2) Control, as distinct from ownership, is clearly exercised by top managers of financial corporations. The members of the boards of directors of nonfinancial corporations, where insiders simultaneously confront and cooperate with the managers of financial institutions, are also part of the overall process of decision making.

3) Large flows of dividends and capital gains converge from nonfinancial corporations toward this network of financial institutions. The process of allocation of these flows between various stakeholders is complex. A first stream goes to rich households, pension funds, and other thrift institutions, whose assets are managed by these large financial institutions. The financial institutions, themselves, pay dividends to their shareholders, be they individuals or other financial institutions of the system (due to reciprocal ownership), so that these flows may go directly to the beneficiaries or may be redistributed within the network itself. What we know of high incomes shows that a large fraction goes to the managers of these financial institutions, who also receive large incomes resulting from their participation to the boards of directors of nonfinancial corporations.[6] Thus, besides capital gains and dividends, the very high wages of managers working in these institutions also constitute a key element in the formation of income inequality at the top.

3. The capitalist *tour-de-force*

At stake for capitalist families in the on-going transformation of relations of production is the access, already well underway, to the new modes of extraction of surplus-labor through the channel of high wages. In the earlier social order (between the New Deal and the 1970s), the transition to managerial relations of production initiated during the first decades of the 20th century had already undergone a new process of acceleration, but in a social configuration straightforwardly adverse to capitalist classes, leading to their gradual elimination jointly with a comparative decline of the privileges of top managers. Figure 5 shows that, in the era of neoliberalism, both wages and capital income eventually increased at the top, and to a spectacular degree. Concerning top managers, at stake is the unambiguous continuation of managerial trends in a new configuration strengthening their towering position. Besides the participation of the siblings of capitalist families to upper management, a rejuvenation of capitalist trends was achieved simultaneously—overall, a double benefit for the old upper class. The *tour-de-force* on the part of capitalist classes in neoliberalism is this joint access to the upper layers of wage hierarchies and the restoration of capital income to their benefit. Under such circumstances, it is easy to understand the crucial role played by the alliance between the upper segments of managerial and capitalist (capitalist-managerial) classes in the conduct of this transition, and the exaggerations of "super-managers-capitalists".

This is what neoliberalism is all about.

VI. APPENDIX. Two-Class patterns in the United States: The work of econophysicists

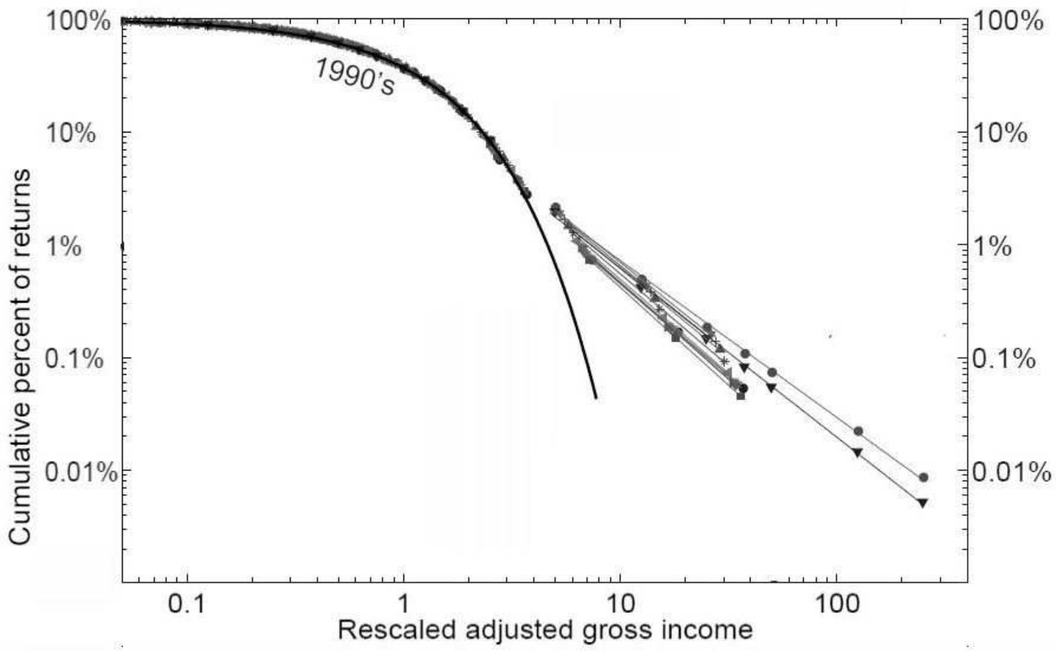
The IRS data did not only inspire PSZ's investigation. This appendix is devoted to the work of econophysicists (in particular around Victor M. Yakovenko) on income distribution in various countries (here limited to the United States).[7] The relationship to the analysis in our paper is tight. Two major findings must be emphasized:

[6] It is interesting to see how the wages of financial managers diminished much less during the 2008 crisis than the flows of dividends.

[7] The list of countries is: Australia, Germany, India, Italy, Japan, New Zealand, the United Kingdom, and the United States. (References are given in Rosser and Yakovenko, 2009). The most important studies are: Banerjee and Yakovenko (2010), Dragulescu and Yakovenko (2001), and Nirei and Souma W (2007).

1) A two-class structure is unambiguously revealed, a lower class (the great majority of the population), and an upper class (1–3% of population). It is fascinating to see two researchers in the field stating: "The coexistence of two classes appears to be a universal feature of income distribution" (Banerjee and Yakovenko 2010).
2) This research sheds considerable light on the growth of inequalities in neoliberalism and the changing features of the upper class.

Figure A1 – Two laws of income distribution for two classes



The three figures in this appendix are borrowed from Silva and Yakovenko (2005).

1. Two-Class patterns

The IRS yearly data on income provides the number of households by income fractiles (15 to 30 fractiles, depending on the period). The variable on the horizontal axis in Figure A1 (Figure 2 in Silva and Yakovenko, 2005) is a measure of the average income in each fractile as a ratio to the average income of the lower class. The vertical axis measures the cumulative probability for a household to receive an income larger than a given value. For a given year, a series of dots (15 to 30) are represented, from the upper left-hand corner, where the cumulative probability reaches its maximum value (100 percent), to the lower right-hand corner where the lowest dot denotes the average income of the upper fractile. The maximum value on the horizontal axis is about 400 times the average value (denoted 1). The same representation is repeated for twelve years from 1990 to 2001. (In Silva and Yakovenko (2005), the same investigation is also conducted for the 1980s.)

Two important results follow:

1) A clear separation is manifest between the mechanisms ruling the income distribution of, respectively, the bulk of households, the lower class (to the left), and the top fractiles, the upper class (to the right). The first distribution law is an "exponential law", and the second a "power law". [8] (This power law had been put forward by Vilfredo Pareto (1896) as typical of high income distribution.)
2) Income distribution remained very stable during the period considered for the great mass of households (the exponential law), as all dots form an almost continuous line. The same outcome is observed during the 1980s. This stability of income distribution is striking. There is much less stability for the upper fractiles (the power law), as the "rules of the game" were significantly modified during neoliberal decades (Section 2.).

[8] The authors of these studies built models susceptible of accounting for these distinct laws.

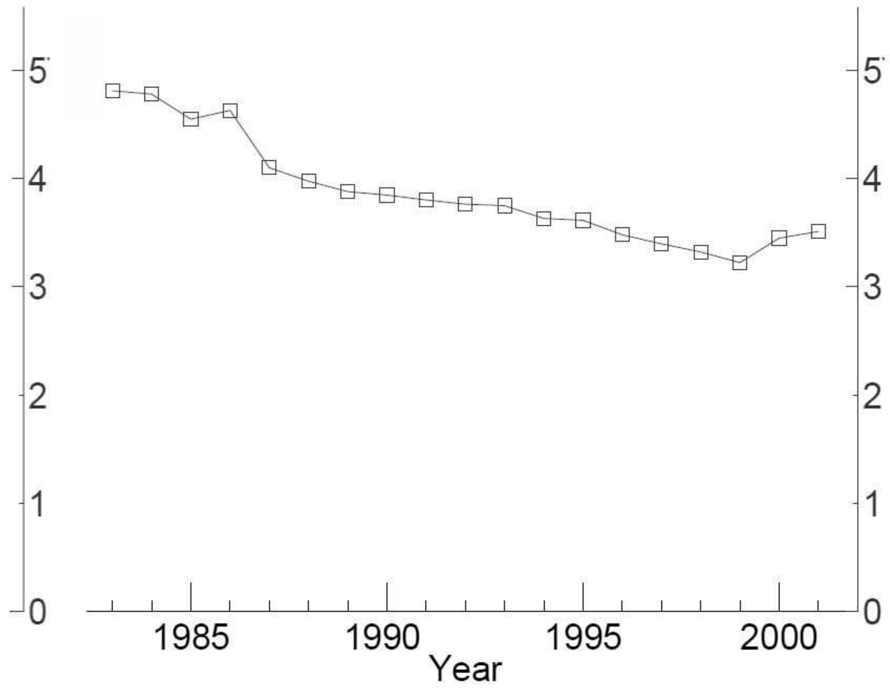
The clear break in income distribution emphasizes the specific features of upper income brackets, justifying the reference to two social classes. There is no overall pattern of income distribution (income inequality) valid for the entire population of households. An important step forward is, thus, accomplished, compared to Thomas Piketty's analysis. Not only a measurement of inequality is put forward, but an endogenous boundary between two classes is revealed.

2. The growth of inequalities in "neoliberal managerial capitalism"

We now turn to the transformations that occurred during neoliberal decades:

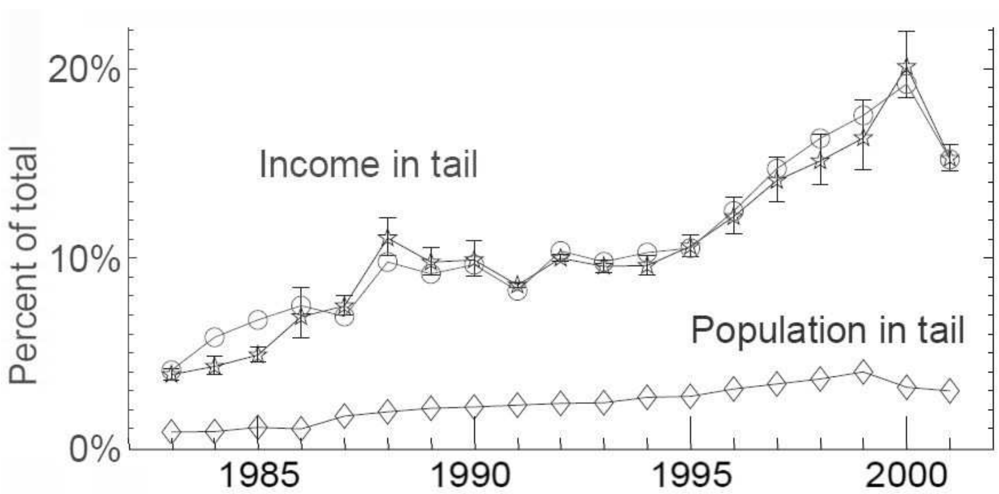
1) *The increase in the size of the upper class.* Figure A2 shows the income level marking the separation between the two classes in each year (still measured, on the vertical axis, as a number of average incomes in the lower class). This border income rather steadily diminished between 1980 and 2001, from almost 5 to 3 or 3.5. The fraction of the population belonging to the upper class increased, as the (comparative) income boundary required to be part of the group diminished. This broadening is even more obvious looking directly at the number of households in the group. This number, in the lower line in Figure A3, rose from 1 percent to 3 percent of the total population. It is important to note that 1 percent of the total population means 1 500 000 households. Thus, the upper class is not simply the small world of big capitalists and top managers (as in the top 0.1 percent or 0.01 percent), as opposed to the rest of the population, but forms a much larger population (besides capitalists, a broader managerial class).
2) *The rise of the income garnered by the upper class*. The upper variable in Figure A3 shows the total income of the upper class during neoliberal decades. This total income rose from 4 percent to nearly 20 percent of national income. Since the upper variable (income) increased more than the lower variable (number of households), it follows that the average income of one household in the upper class rose during neoliberalism, despite the increase of the population involved. This concentration is a clear expression of the rise of income inequality.
3) *The tripolar class pattern*. In these studies, only two classes are distinguished, instead of three classes (capitalists, managers, and popular classes) in our own framework. We believe the diminished lower boundary of the upper class (broadening its ranks downward) testifies to the progress of the managerial component of upper classes, the upper fraction of wage earners escaping from the standard distribution of income at the top of wage hierarchies. In other words, the distribution of the income of a number of households, whose income amounts to the bracket defined by 3-5 average incomes, now participate in the new mechanisms typical of income distribution within upper classes, an expression of the merger and new social alliance at the top. We see in this transformation a new feature typical of the dynamics of "neoliberal managerial capitalism".

Figure A2 – The border income between the two classes (as a ratio to the average income in the lower class)



The border income diminished from 5 to 3.5 average income, manifesting the broadening of the upper class.

Figure A3 – Number of households in the upper class (the "tail").



The percentage of the total population belonging to the upper class rose from 1 to 3 percent. The total income of the upper class rose from 4 to 20 percent of total income. This rise was the combined effect of the increase in the number of households and the average income of each household belonging to the group.

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