# Periodizing capitalism.
# Technology, institutions, and relations of production

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## RÉSUMÉ

### PÉRIODISER LE CAPITALISME. TECHNOLOGIE, INSTITUTIONS ET RAPPORTS DE PRODUCTION

La difficulté principale posée par la périodisation du capitalisme est la multiplicité des critères alternatifs: croissance, crises, concurrence internationale, technique et répartition, politiques, institutions, etc. Une première périodisation est définie, combinant la technique et répartition à un vaste ensemble de transformations institutionnelles. A la fin du XIX[e] siècle, le taux de profit connut une phase de baisse *à la Marx*, et les États-Unis entrèrent dans une première crise structurelle. Le développement révolutionnaire des sociétés par actions et la révolution managériale furent à l'origine de nouvelles tendances, avec un taux de profit croissant, dessinant une nouvelle phase dans l'évolution du capitalisme au cours de la première moitié du siècle. Cette phase fut provisoirement interrompue par la crise de 1929, introduisant au keynésianisme et à au développement de la protection sociale. Une nouvelle trajectoire *à la Marx* fut observée après la Seconde Guerre mondiale, qui culmina dans la crise structurelle des années 1970, conduisant à la réaffirmation du pouvoir de la finance dans le néolibéralisme. Sur bien des points, cette périodisation en rejoint d'autres renvoyant à l'impérialisme, à l'internationalisation, aux ondes longues ou à des "régulations". Une interprétation plus générale apparaît cependant nécessaire, utilisant le cadre d'analyse marxiste des rapports de production et des structures de classe. Un nouveau mode de production *cadriste* (managérial) voit progressivement le jour au sein du capitalisme. Une nouvelle contradiction de classe s'affirme progressivement, entre les cadres et ce qu'on pourrait appeler les encadrés, dont les effets viennent se combiner à ceux de la contradiction traditionnelle entre propriétaires et travailleurs. Il faut voir dans le développement des sociétés par actions et la révolution managériale des expressions de ces nouveaux rapports de production dans les entreprises et leur rapport à la finance (la séparation de la propriété et de la gestion). Certains aspects du keynésianisme dotèrent cette transformation cadriste d'une composante publique. Ces évolutions contribuent à une érosion progressive de la domination des propriétaires de moyens de production. La montée plus récente du néolibéralisme a contribué à la réaffirmation de ce pouvoir des propriétaires, mais n'a pas interrompu cette tendance. Au lieu de cela, le néolibéralisme contribue à l'orientation des ces transformations dans le sens d'une émancipation vis-à-vis des exigences du compromis keynésien, dans une direction qui devrait permettre à la classe des propriétaires de se "dissoudre" graduellement dans les rangs de la nouvelle classe managériale.

## ABSTRACT

### PERIODIZING CAPITALISM. TECHNOLOGY, INSTITUTIONS, AND RELATIONS OF PRODUCTION

The major difficulty in the periodization of capitalism is the existence of several alternative criteria: growth, crises, competition, international relationships, technology and distribution, policies, institutions, etc. We combine the trends of technology and distribution with a broad set of institutional transformations to propose a first periodization of the US economy since the Civil War. During the late 19th century, the profit rate declined along a pattern *à la Marx* and the US entered into a first structural crisis. New trends were created by the corporate and managerial revolutions, manifested in a rising profit rate, and a new phase was apparent during the first half of the century. It was provisionally interrupted by the Great Depression, which promoted the institutions of Keynesianism and the Welfare State. A new trajectory à la Marx was manifested after World War II, culminating in the crisis of the 1970s, which allowed for the reassertion of the power of finance in neoliberalism. This periodization is in line with many aspects of others, emphasizing imperialism, internationalization, long waves, or régulations. We contend, however, that a broader interpretation is required using Marx's framework of relations of production and class patterns. A new managerial mode of production is gradually emerging within capitalism. A new class contradiction between managers and "managed" personnel is progressively asserted, and combines its effects with the contradiction between owners and workers. The corporate and managerial revolutions were the expressions of these new relations of production within firms in relation to finance (the separation between property owners and management). Some aspects of Keynesianism also defined a "public" component of this managerial shift. These evolutions progressively eroded the dominance of the owners of the means of production. The more recent rise of neoliberalism reasserted their power, but did not stop this evolution. Instead, it tends to inflence these changes, away from the commitments of the class compromise underlying Keynesianism, in a direction that will allow this class to gradually "dissolve" itself within the new managerial ruling class.

MOTS CLEFS : Periodization, capitalisme, rapports de production, classes, managers, néoliberalisme.
KEYWORDS : Periodization, capitalism, relations of production, classes, managers, neoliberalism.
J.E.L. Nomenclature: P00.

# Introduction:
# Competing criteria

Few, if any, would contend that nothing has changed within capitalism, or assert that historical evolution can be assessed on purely quantitative grounds (such as the growth of output or technical progress). Instead, the major difficulty in periodizing capitalism is the existence of various *competing* criteria. Contemporary technology and the corresponding organization of production differ more than quantitatively from what they were a century and a half ago. Many will insist on the metamorphosis of institutions, firms in particular (their size and the related forms of competition, the division of labor...), but a broad variety of economic and social institutions are also at issue, such as the legal framework, or the state (its involvement in economic affairs or the pattern of international relationships). These viewpoints are clearly reflected in the various labels applied: Imperialism, State capitalism, Monopoly capitalism, State monopoly capitalism, Managerial capitalism, Keynesianism, Fordism, Neoliberalism, etc. Further complexity derives from the broad heterogeneity prevailing among the various segments of a national economy and among countries.

There is nothing troubling in this diversity of approaches. Capitalism is obviously a complex social system, whose analysis requires the combination of various interrelated components. However, all criteria cannot be placed on the same footing: A hierarchy must be imposed on these aspects of capitalism, and the way they are combined is certainly not neutral.

The periodization set forth in this paper relies on Marx's analysis, although, as will become gradually more apparent, it goes significantly beyond Marx's demonstration since history pursued its movement forward during the last century. The central notions are familiar: modes of production (their succession and interrelations), relations of production, classes (their struggle, the internal contradictions of ruling classes, and class compromises), and the state (its institutions and policies). This historical analysis is also based on the observation of historical tendencies and crises (in particular the falling profit rate and structural crises). In these respects, the perspective adopted is traditional within Marxist circles.

There is no *a priori* order in the presentation of these various viewpoints. We will begin with technology and distribution, and then turn to institutions and policies. These elements allow for a comparison with other approaches in terms of imperialism and internationalization, long waves, and "régulation" (as defined by the Régulation school). Only then, we will suggest our more general interpretation, in terms of relations of production and class patterns.

The paper divides into 5 sections[1]:

1. Section 1 suggests a first simple periodization in three stages, ending in the early 1980s. It is based on the historical profiles of technology and distribution, in particular the movements of the profit rate which successively diminished in the late 19th century, rose

1. This paper borrows from earlier works. G. Duménil, D. Lévy, *The Economics of the Profit Rate: Competition, Crises, and Historical Tendencies in Capitalism*, Aldershot: Edward Elgar (1993); *La dynamique du capital. Un siècle d'économie américaine*, Paris: Presses Universitaires de France (1996); *Au-delà du capitalisme?*, Paris: Presses Universitaires de France (1998).

from the early 20th century to the 1950s or 1960s, and then declined again. We denote the first and third periods as periods *à la Marx*. Three structural crises are distinguished: one in the 1890s, the Great Depression, and one in the 1970s. A new phase, analogous to the first half of the 20th century with its rising profit rate, may now be underway since the mid-1980s.

2. Section 2 discusses the transformations of institutions and policies. The first major set of events was the occurrence of the *corporate* and *managerial* revolutions, and the emergence of modern finance, at the turn of the century. These institutions of modern capitalism allowed for a new efficiency, which made possible the rise of the profit rate during the first half of the century, in combination with larger growth rates of wages. The relationships between these transformations and the trends of technology and profitability are reciprocal: The structural crisis of the late 19th century, caused by the decline of the profit rate, made these institutional changes possible and introduced the new course of capitalism during the first half of the 20th century. The Great Depression provided the conditions for the second set of events: the emergence of the institutions of Keynesianism and the Welfare State, in the wake of the New Deal and World War II. In combination with the favorable trends of technology, this new institutional framework — in which the role of the state was central — shaped the framework prevailing during the first decades following the war. The crisis of the 1970s provided a foundation for the rise of neoliberalism, upsetting this institutional framework, targeted toward the preservation of financial interests. Overall, the various elements listed so far — technology and distribution, structural crises, institutions and policies — allow for an already rather complex periodization of US capitalism.

3. Section 3 compares our analysis to four traditional approaches: (1) imperialism, (2) internationalization and globalization, (3) long waves, and (4) régulations and regimes of accumulation. In this section, we do not question the relevance of these analyses, but emphasize a number of common points and differences. In our opinion, the main limitation of these approaches is their failure to identify the underlying evolution of relations of production and class patterns that we introduce in section 4.

4. Section 4 interprets the above changes in capitalism in the broader Marxist framework of "historical materialism" — relations of production, class patterns, and power relations (hegemony and compromise):

(a) Both the separation between *ownership* (concentrated in modern financial institutions) and *management* (in large corporations), and the involvement of the state in the control of credit mechanisms and finance, are described as actual transformations of relations of production. The ownership of the means of production is now concentrated within financial institutions, under the aegis of large capitalists (controling the assets of anonymous small holders of securities), defining the contours of *finance*. The emergence of clerical and managerial personnel (within private firms and in the public sector) also modified class relationships. A new class contradiction — between managerial personnel and other salaried groups (workers and clerical personnel) — combined its effects with the contradiction between the owners of the means of production and workers to produce the contemporary pattern of class relationships.

(b) We interpret Keynesianism and neoliberalism as various social configurations in which the power of ruling classes is exerted. For example, we use the expression *Keynesian compromise* to refer to the limitations put, after the Great Depression, to the power of finance, the rise of both the private and public components of upper management, and the concessions made to salaried workers in general (in terms of purchasing power, employment, and social protection). Instead, *neoliberalism* refers to the reassertion of the power of finance, the reliance on top management, and the erosion of the previous compromise.

Thus, the basic process underlying the present evolution of capitalism is the coexistence of two social "logics", corresponding to the traditional capitalist logic, and a new emerging managerial order. The engine of this overall evolution is class struggle (including the attempts to build a socialist alternative to capitalism). Workers fight for the improvement of their condition, but the coexistence between capitalists, managerial and clerical personnel, and between these latter groups and workers, is also at issue. Globally, capitalists still dominate from within the framework of modern finance.

This analysis elaborates on older approaches of *managerial capitalism*. To what extent managers can express their own "sectional" interests or simply act as agents of capitalists depends on the above *social configurations* in which class power is exerted. The assertion of the autonomous power of managers is a gradual process in which phases of regression — or changing patterns — may be observed. That they might stand above class interests (as was contended during the emergence of the managerial revolution, then in relation to the social achievements of the Keynesian era, or in former socialist countries) is an illusion.

5. Section 5 questions the ability of neoliberalism to interrupt the gradual assertion of the managerial feature of our societies. More than ever managers direct the economy, including financial firms themselves — in particular, mutual funds and pension funds. Rather than halting this evolution, neoliberalism is described as an attempt to lead the present evolution of capitalism along a specific path, simultaneously favoring private institutions as opposed to public institutions (concerning insurance, retirement, education...), and redirecting the actions of some of the institutions of Keynesianism (central banks, the IMF...) toward the interests of finance, away from the commitments of the Keynesian compromise or the direct involvement of the state in economic affairs as in the public sector in Europe.

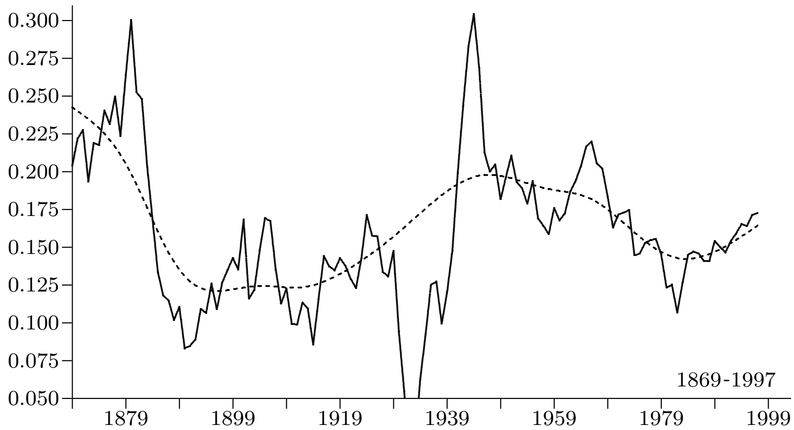
# 1 - Historical tendencies and structural crises

This section is devoted to a first straightforward approach to the periodization of US capitalism based on technology, distribution, and structural crises. Three broad phases are distinguished in section 1.1. Then, section 1.2 discusses the structural crises of the late 19th and 20th centuries, and compares them to the Great Depression, whose causes were thoroughly different. Last, section 1.3 suggests the emergence of a possible new phase of restoration since the mid-1980s.

## 1.1 Three phases in the evolution of the profit rate

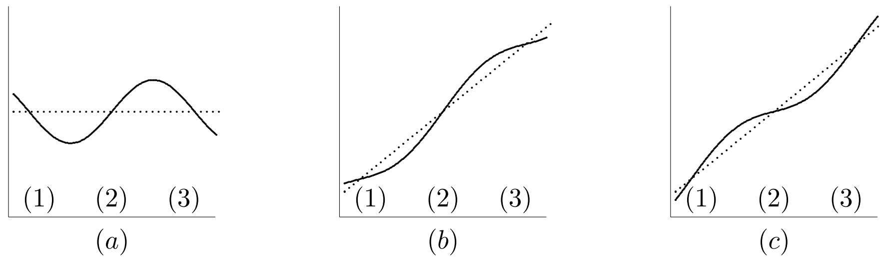
The examination of the major variables describing technology and distribution in the US economy, from the Civil War to the mid-1980s, suggests a first periodization in three phases. As shown in figure 1, the secular trend of the profit rate was approximately

Figure 1 The private nonresidential US economy: The profit rate (——) and its trend (-----) (1869-1997)




Profit rate = (Net product − Labor compensation)/Fixed capital.
A correction is made for self-employed persons. Since 1925, 1929, or 1948, depending on the variables, we use BEA data. The sources for the earlier years are given in G. Duménil, D. Lévy, The U.S. Economy since the Civil War: Sources and Construction of the Series, Cepremap, Modem, Paris (1991).

Figure 2 Historical profiles of the main variables from the Civil War to the mid-1980s




Panel (a): Capital productivity and profit rate; Panel (b): Labor productivity and real wages; panel (c): Capital-labor ratio. Period (1): Late 19th century; period (2): First half of the 20th century; period (3): Second half of the 20th century up to the mid-1980s. This figure contrasts the upward trends of the variables as in panels (b) and (c), to the horizontal trend of the variables as in panel (a). But three stages are apparent in each case.

horizontal, but three distinct periods can be defined (as suggested by the trend line in the figure).[2] The first phase stretches from the Civil War to 1900 or World War I; the second phase corresponds approximately to the first half of the 20th century; the third phase stretches from the end of the second period to the mid-1980s.

This periodization is not specific to the profit rate, and a similar profile is observed for the ratio of output to the stock of capital, or the "productivity" of capital (as suggested in panel (a) of figure 2). Other variables, such as labor productivity or the hourly real wage (total compensation) are trended upward, but their growth was successively slow,

2. Such a trend line can be drawn using a moving average or Hodrick-Prescott filter. The two methods are practically equivalent. We use the second one.

rapid, and slow, in comparison to their secular trend (panel (b)). A similar pattern is also observable for the capital-labor ratio, an indicator of the mechanization of production, but the growth rates were, in turn, rapid, slow, and rapid (panel (c)). These observations confirm the relevance of this periodization in three phases. (Since the labor cost and labor productivity moved in tandem, the share of profits remained approximately constant.)

Concerning technology and distribution, the trends prevailing during the later decades of the 19th century and during the decades following World War II up to the mid-1980s are similar in many respects, and appear unfavorable. The growth of labor productivity and of the real wage was slow; the capital-labor ratio rose sharply; the stock of fixed capital increased more rapidly than output (the productivity of capital declined); the profit rate diminished and the growth rate of real wages remained smaller than its secular average. The features of these periods echo Marx's analysis of historical tendencies in Volume III of *Capital*, and can be labeled "periods *à la Marx*". Conversely, in spite of the Great Depression, the intermediate period appears strikingly favorable: the growth rates of labor productivity and of the real wage rate were comparatively large; the productivity of capital and the profit rate *increased*.

## 1.2 Two distinct types of structural crises

Associated with this pattern of evolution are two *structural crises*, one in the late 19th century, and one during the 1970s and 1980s. By "structural crises", we mean rather long periods, distinct from the usual recessionary episodes of the business cycle. In addition to the unfavorable trends of technology and distribution, they can be characterized by a sluggish accumulation, large business fluctuations, and lasting unemployment (possibly in combination with financial instability). Following Marx, we interpret these structural crises as the typical outcomes of periods of actual decline of the profit rate.[3] Low profit rates are detrimental to accumulation, and contribute to business-cycle fluctuations; a slow accumulation and recurrent recessions are responsible for lasting large unemployment rates.

The nature of the Great Depression of the 1930s was thoroughly different from that of the two others. Paradoxically, the depression occurred during a period denoted above as "favorable" in several respects. The problem was the large *heterogeneity* among firms and a still immature institutional framework for the stabilization of the macroeconomy. The rapid changes underway were concentrated within one segment of the economy, the large corporations backed by finance, whereas the technology and organization of other smaller and still traditional firms were becoming more and more obsolete. The recession in 1929 began a process of devaluation and destruction of the capital invested in this lagging component of the economy. Only extreme demand and credit policies could possibly have avoided the dramatic contraction, vigorously bolstering the activity of the more advanced sector in order to compensate for the disappearance of the older one.

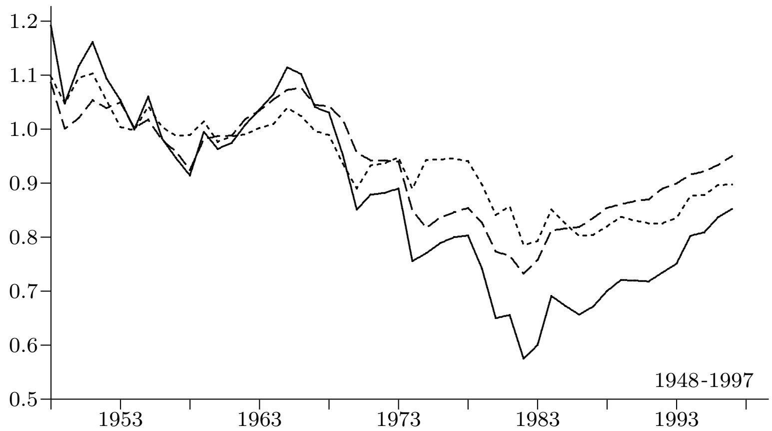
3. "On the other hand, however, in view of the fact that the rate at which the total capital is valorized, i.e. the rate of profit, is the spur to capitalist production (in the same way as the valorization of capital is its sole purpose), a fall in this rate slows down the formation of new, independent capitals and thus appears as a threat to the development of the capitalist production process; it promotes overproduction, speculation and crises, and leads to the existence of excess capital alongside a surplus population." (K. Marx, *Capital, Volume III*, New York: First Vintage Book Edition (1894), ch. 15, p. 350).

The depression contributed to the acceleration of the transformation of technology and distribution initiated at the beginning of the century, eliminating backward firms, but only provisionally interrupted the movement of the major variables during those years. For example, the progress of labor productivity was affected by the depressed levels of activity, but its pattern was resumed after the depression.

## 1.3 A new phase?

An examination of figure 1 suggests that a new phase might be presently in progress, initiated at some point during the 1980s. If this were the case, history would repeat itself as far as the movements of these variables are concerned. Figure 3 documents in a more detailed manner the evolution of: (1) the profit rate (for a similar definition as in figure 1 and a similar unit of analysis), (2) the share of profits, and (3) the productivity of capital. For legibility, the three variables have been normalized to 1 for the average of the decade 1956-1965, a benchmark period in the levels of the profit rate prior to the structural crisis. (Recall that *Profit rate* = *Productivity of capital* × *Share of profits*.[4])

Figure 3 The private nonresidential US economy: Profit rate (——), the productivity of capital (— —), and the share of profits (-----) (1948-1997) *(a)*




The three variables have been normalized to 1 for the average of the decade 1956-1965. This corresponds to 0.21 for the profit rate, 0.69 for the productivity of capital, and 0.31 for the share of profits.

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*(a)* This figure is borrowed from G. Duménil, D. Lévy, Profit rates: Gravitation and Trends, http://www.jourdan.ens.fr/levy/dle1999e.pdf, Cepremap, Modem, Paris (1999).

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4. This relationship follows from:

$$\frac{\text{Profits}}{\text{Capital}} = \frac{\text{Net product}}{\text{Capital}} \times \frac{\text{Profits}}{\text{Net product}}$$

Figure 3 confirms that the profit rate fell considerably during the 1970s. In 1982, it was only 57% of its average value during the decade 1956-1965. In 1997, it was about at its level of 1970. The recovery since the mid-1980s is significant, but partial: 65% of the decline between the 1956-1965 decade and 1982 has been recovered to date. Interestingly, most of this recovery resulted from the increase of the productivity of capital, while the share of profits only rose slightly. This rise of capital productivity since 1982 is reminiscent of the upward trend of this variable during the first half of the 20th century, our intermediate period, and provides a crucial clue in the identification of a new phase.

More and more, recent trends suggest that US capitalism has entered a new phase. If this movement is confirmed, *four phases will be apparent since the Civil War.*

# 2 - Institutional frameworks and policies

This section is devoted to the transformation of institutions and policies, a second viewpoint. The first major set of events occurred in the early 20th, with the corporate and managerial revolutions (section 2.1). It allowed for the favorable trends described in the previous section, in spite of the Great Depression. The conditions for the second set of social innovations were created by the depression. It is the emergence of what can be called the “Keynesian compromise”, basically the control of the macroeconomy and the Welfare state (section 2.2). The structural crisis of the 1970s allowed for a new major shift in the course of capitalism: the emergence of neoliberalism (section 2.3). Last, section 2.4 provides a brief synthesis of the periodizations introduced in section 1 and the present section.

## 2.1 The new rise of capitalism in the early 20th century, as managerial capitalism

It is not possible to disconnect the trends of technology and distribution in the 20th century from the transformations of the institutional framework of modern capitalism. A prominent aspect of this relationship was the evolution of firms and of the forms of ownership. The new technology implemented in the late 19th century required larger units of production, and its development was naturally echoed by the emergence of larger enterprises. Small traditional firms, owned by individuals or families, were not adapted to the development of gigantic structures such as railroads. But the rise in *size* actually required new methods of management and large funds had to be collected.

The main features of the period can be briefly sketched as follows.[5] In the late 19th century, as the economy was sliding along a trajectory *à la Marx*, the progress of industry and transportations created unprecedented competitive tensions. A network of agreements, pools, and trusts was developed by firms attempting to avoid the pressures on their profit rates. This movement was later labeled “loose consolidation”, meaning that previously

5. G. Duménil, M. Glick, D. Lévy, “The History of Competition Policy as Economic History”, *The Antitrust Bulletin*, XLII (1997), p. 373-416.

independent firms organized to share markets or profits, to fix minimum prices, etc., preserving their existence as separate entities. The antitrust legislation discouraged these organizations, but there was no reversal. Instead, this legislation only encouraged new forms of "tight consolidation", in which independent enterprises were actually *merging* into larger units with common ownership. When the economy recovered from the depression of the 1890s, a sudden wave of incorporation occurred in a few years, right at the turn of the century, known as the "corporate revolution". A totally new institutional framework was shaped, whose cornerstone was the large corporation backed by finance. There was, however, a second aspect to this emergence of the institutions of modern capitalism, the *managerial revolution*[6], which is too often described in a reductionistic manner as Taylorism or Fordism. The organization of production and all aspects of management in general were now performed in these firms by a broad pyramid of managerial and clerical personnel. This managerial revolution allowed for new degrees of efficiency. It was, in our opinion, a crucial factor in the technological achievements of the first half of the 20th century, that finally accounted for the new trends of distribution. The new efficiency manifested in the progresses of labor and capital productivity cannot explain the larger rate of growth of real wages and the protection of the Welfare State independently of the struggle of workers, *but it created conditions conducive to these improvements.*

What is the relationship between *management* and the trend of the profit rate? The purpose of management, in the broad sense of the term, is to maximize the profit rate. This requires simultaneously a reduction in costs and minimizing the amounts of capital advanced. The problem in the previous forms of technical change was precisely the subordination of the progress of labor productivity to the addition of large masses of fixed capital. This is what mechanization is about in the configuration (manifested in the rising composition of capital) described by Marx in his analysis of the tendency for the profit rate to fall. Conversely, the assembly line, the typical form of mechanization in the first half of the century, was such that this form of mechanization did not materialize into a strongly rising capital-labor ratio. The growth rate of this variable was actually *reduced* during the first half of the 20th century in comparison to the latter decades of the 19th century (panel (c) in figure 2). This was due to the structure of the machinery itself, its continuous use, the pressure it puts on labor, and the corresponding organization of the shopfloor. But the assembly line is only one example among others. Managing inventories or liquidity has similar effects on the profit rate, as well as improved commercial practices. The extension of this new technology and organization required several decades. Overall, the managerial revolution must be seen as the major countertendency to the falling profit rate in the entire 20th century.

## 2.2 The New Deal and the Keynesian compromise

In the 19th century, the stability of financial institutions was in the hands of private institutions, more specifically the upper fraction of the monetary and financial system. (The monetary and financial system in the US, from the Civil War to the creation of the Federal Reserve, is known as the *National Banking System*.) Large banks, mostly New York banks, were acting as reserve banks, sensitive to the variations of the stock

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6. A.D. Chandler, *The Visible Hand. The Managerial Revolution in American Business*, Cambridge: Harvard University Press (1977).

market or to movements within the banking system itself, modifying interest rates and influencing the flows of credit. Special devices were developed during financial crises in order to avoid the suspension of payments by banks. Although these actions impacted on business conditions, they were not directly targeted to stabilizing the macroeconomy. The creation of the Federal Reserve in 1913 modified this framework, but the earlier reluctance to directly influence economic activity still prevailed during the 1920s.

Given the specific conditions of the period — in particular, the strong technical and organizational heterogeneity among firms mentioned in section 1.2 — the monetary and financial institutions proved unable to stem the collapse during the three first years of the crisis. Despite the eagerness of finance to preserve its hegemony, the government and the administration was forced into action. The New Deal is too often described in relation to Keynesian demand policy and, in particular, deficits. Although public work was part of the process as a way to "prime the pump", deficit was never accepted as a policy device before 1937 (but it proved unavoidable). The intervention of the state in economic affairs was direct and sharp. The national banking vacation was declared, and the state controlled the reopening of the viable fraction of the system and took care of unsound debts. The economy was organized in 12 groups (the codes) where firms shared markets, fixed minimum prices and minimum wages, under the aegis of the *National Industrial Recovery Administration*... The most extreme components of this system did not survive the depression, in spite of the large commitment of the state in economic affairs during World War II.[7]

It is during the war that the ideas of Keynes spread to the US, and that it became relevant to refer to a Keynesian revolution. This "revolution" was actually a social *compromise* (a class compromise, as we will contend in section 4.3):

1. As originally formulated by Keynes, the basic principles of Keynesianism can be summarized as follows: (1) The state does not interfere with the conduct of private business (production and investment in the various industries); (2) Its focus is macroeconomics, *i.e.*, the stabilization of the general level of activity and full employment (by monetary policy and, whenever private agents do not respond to the easing of credit conditions, by demand policy); (3) The activity of finance must be regulated, in particular with respect to both stock market operations (which, following Keynes, are responsible for business-cycle fluctuations) and international transactions and capital flows. Thus, on the one hand, private initiative and property rights over the means of production were preserved but, on the other hand, finance lost its hegemony over financial and monetary mechanisms whose control was transferred to public agents.

2. In many respects, the actual transformations overstepped the above limits and Keynes' target concerning full employment. A crucial element was the rise of the purchasing power of wage-earners and the social protection of the *Welfare State*. Unions became important partners in the management of the new social order, and a new legislation defined the rights of salaried workers. State intervention grew to considerable extent concerning education and scientific research. As is well known, other countries went even further, with the direct involvement of the state within segments of the productive system.

In the late 1960s, economists and, more generally, social scientists forecasted the end of crises and a new affluent society: Keynesian economists had finally found the recipe

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7. G. Duménil, D. Lévy, "Pre-Keynesian Themes at Brookings", *in* L. Pasinetti, B. Schefold (eds.), *The Impact of Keynes on Economics in the 20th Century*, Aldershot: Edward Elgar, 1999, p. 182 -201.

to stabilize the general level of activity and stimulate investment. Japan and Europe were gradually catching up with the US under the umbrella of the financial and monetary institutions of *Bretton Woods*. The conditions of salaried workers improved considerably. Not every aspect of the picture was rosy, but these decades appear retrospectively as outstanding. This new age of capitalism actually combined *managerial* traits inherited from the revolution in organization initiated in the wake of the crisis of the late 19th century, and the *Keynesian* features ushered in by the Great Depression and World War II. The exceptional features of the economy in the major capitalist countries from World War II to the 1970s reflected the combination of the two types of developments: the favorable trends of technology and the Keynesian framework.

It is interesting to compare the two facets of finance as described: (1) in the previous section, its involvement in the corporate and managerial revolution, and (2) in this section, concerning its resistance to reforms required by the stabilization of the macroeconomy. Although this statement is certainly oversimplifying, one can assess the first achievement as a contribution to the progress of relations of production and productive forces, and the second as a quite negative influence, whose social and political costs were huge and actually threatened the survival of the system in the 1930s. The implicit recognition of this *dual* character of finance was a central aspect of the Keynesian compromise which accounts for its historical impact.

## 2.3 The new trajectory à la Marx, neoliberalism, and the possible fourth phase

Once the new managerial organization established and technology redesigned, the earlier conditions of process innovation again manifested themselves: the slow and patient improvement under the pressure of costs. The US economy returned to a trajectory *à la Marx* after the war. Efficient management was still necessary since the new organization constantly requires the care of managerial and clerical personnel, but the heroic age of revolutions and dramatic improvements belonged to the past. Most of the lagging segment of the economy had been eliminated during the depression and the war, and the profit rate during the 1950s and 1960s remained very high — but the decline was underway.

With the fall of the profit rate, accumulation slowed down, and the tensions on distribution (between salaried workers, firms, and finance) were exacerbated. They resulted in a surge of inflation. Keynesian policies of demand management delayed the crisis but were not adequate to cure the structural crisis of the 1970s. Inflation was eroding the income of finance that had, in addition, never accepted its setback during the Keynesian compromise of the post-World War II era. During those years, finance had been active in building a new international framework at a distance from domestic regulations. The converging interests of "eurobanks", of rising multinational corporations, and of the US government (in relation to the large balances of dollars held throughout the world) created the conditions for *a restoration of the power of finance*.[8] A sharp policy about-face occurred with the election of Margaret Thatcher and Ronald Reagan — the products of an underlying social shift in power.

8. E. Helleiner, *States and the Reemergence of Global Finance. From Bretton Woods to the 1990s*, Ithaca: Cornell University Press (1994).

The new framework is now known as *neoliberalism*. It is hardly necessary to recall here its main components: quasi-zero inflation, preeminence of the stock market, corporate governance, stagnating wages, progressive erosion of the Welfare State and regulations, pension funds and private health insurances, free international mobility of capital, etc. Neoliberalism was devised in order to restore the interests of capitalists. Zero inflation protects the purchasing power of lenders. It diminishes the inducement to borrow and favors reliance on the stock market. The control of the labor cost and deregulation have an obvious positive impact on the profitability of firms.

In spite of the root *liberalism* in *neoliberalism*, this new phase cannot be interpreted as a return to the capitalism of the good old days of the mid-19th century, when neither corporations nor modern finance existed. Large corporations are there, more than ever, and are strictly managed by large pyramids of managerial and clerical personnel. Actually, upper management was reminded its basic function: maximizing the profit rate in the rather exclusive interest of shareholders, independently of the social constraints of the Keynesian compromise. Central banks were not dismantled, and they played a crucial role in the fight against inflation. They have been freed from the influence of the state whose action is still subject to the commitments of the earlier social compromise (though to lesser and lesser extent). It is probably not coincidental that finance has now acquired a maximum freedom in the field where it gathered its new forces during the Keynesian years, that of international capital flows.

The new trend upward of the productivity of capital and of the profit rate, apparent since the mid-1980s, is very much like the first half of the 20th century (our intermediate phase), reflecting new performances of management, technology and organization. The restoration of the productivity of capital probably relates to the information revolution, whose scope is manifest in the proportions of the various components of investment.[9] From 1970 to 1996, the share of information investment (computers, communication...) within total investment in equipment (in constant dollars), rose from 5% to 42%! This increased used of information technology was paralleled by a sharp decline in the relative price of this category of equipment.

## 2.4 A synthesis?

Obviously, the difficulty in the periodization of capitalism is to combine the above elements into a coherent whole. The various categories of events do not necessarily coincide in time.

Consider the first phase, corresponding to the first pattern *à la Marx*. It led to a structural crisis in the late 19th century. From these circumstances derived a large institutional transformation, the corporate and managerial revolutions, introducing to a new age, managerial capitalism. To this point, the picture appears rather unambiguous and we can be content with the image of a single phase from the Civil War to the turn of the century.

9. G. Duménil, D. Lévy, "Structural Unemployment in the Crisis of the Late Twentieth Century: A Comparison between the European and US Experiences", *in* R. Bellofiore (ed.), *Global Money, Capital Restructuring and the Changing Patterns of Labor*, Aldershot: Edward Elgar, 1999, p. 33 -48.

The purely technical and distributional approach of section 1 runs, however, into problems with the outbreak of the Great Depression in the course of the diffusion of the managerial revolution and its favorable effects over the entire economy. We interpret the depression as a "cost" of this diffusion, the inability to control the threat posed by the underlying heterogeneity of technology inherent to this diffusion process within a backward institutional framework. A new element must be introduced into the analysis: the lag in the maturation of the "management" of the macroeconomy. The acquisition of this new social skill actually *followed* from the depression and World War II which created the conditions for its development. We must, therefore, distinguish between two large phases: prior to this new revolution and after.

Thus, considering the period stretching from the Civil War to World War II, and abstracting from crisis years, we are left with two main phases: (1) the period *à la Marx* in the late 19th century with the early stabilizing mechanisms of the *National Banking System*; (2) the early 20th century up to the depression, when the new course of technical change and distribution was in progress, but the macroeconomic revolution had not yet occurred (or was only embryonic). The period of the depression and World War II represented an important transition marked by the elimination of the older segments of the economy and the establishment of a new social compromise, creating new potentials for the stabilization of the macroeconomy, the stimulation of growth, and the improvement of living standards.

The first effects of the new unfavorable trends became manifest after the war (when the economy followed a new trajectory *à la Marx*), but up to the mid-1960s, the effects of the managerial revolution still ensured the favorable profile of technology, and the benefits of the new Keynesian framework were felt. In its first steps, the consequences of the new unfavorable course of technical change were provisionally offset by the stimulation of the activity and inflation, but this period culminated in the structural crisis of the 1970s. In the wake of the turn to neoliberalism, new policies and rules were implemented, at first aggravating the crisis, but new more favorable technological trends seem observable from the mid-1980s onward. (Note that we do not mean here that the new technological trends can be imputed to neoliberalism, see section 5.3.)

Thus, three phases can be distinguished after World War II: (1) up to the 1960s, the large profit rate levels were preserved, despite the early effects of the new trajectory à la Marx; (2) the manifestation, in the late 1960s and 1970s, of the new trajectory à la Marx, still in the context of the Keynesian compromise, and (3) the new neoliberal course and the possible emergence of new technological trends. The structural crisis of the 1970s linked the two latter periods.

Obviously, the extension of this analysis beyond the horizon of the US economy adds further complexity. Japan and Europe followed the US with some delay concerning the favorable trends of the intermediate period (the catching-up), the new trajectory *à la Marx*, and the structural crisis. The present international financial instability has now created threats similar to those of the Great Depression, but within a significantly different institutional environment.

# 3 - Imperialism, internationalization and globalization, long waves, and régulations

It is one thing to distinguish a number of phases in the history of capitalism, but quite another to create an overarching interpretation of this succession. As a preliminary to the presentation of our own theoretical framework in the next section, the present section discusses four such interpretations: imperialisms (section 3.1), internationalization and globalization (section 3.2), long waves (section 3.3), and régulations and regimes of accumulation as in the French Régulation school (section 3.4). We will not attempt here to review any of these approaches but only provide illustrations of the broad variety of analyses available, in relation to the line of argument developed in the previous sections.

## 3.1 Old and new theories of imperialism

None of the transformations of capitalism described in this paper remained unnoticed. They provided the materials for the various analyses of capitalism in the late 19th century and early 20th century. Within the Marxist tradition, these analyses often hinge around the notion of *imperialism*. In Lenin's terminology, *Imperialism* referred to a new "stage" of capitalism, and the periodization of capitalism was clearly at issue.

The rise of neoliberalism contributed to resurrecting the debate over imperialism within Marxist circles.[10] Present developments concerning the internationalization of capital and globalization, the new preeminence of finance, the hegemony of the US, and the recurrent monetary and financial crises account for this new interest.

The debate in the early 20th century can only be understood in relation to the eschatological perspective prevailing among Marxists in those years, echoing Marx's and Engel's line of argument in the *Manifesto*.[11] Again, the new stage of capitalism in the late 19th century had to be the *last* stage. Consider Lenin's synthesis in his famous study on *imperialism*[12]:

1. The main feature of the imperialist stage of capitalism was the existence of monopolies.[13] Lenin's account of the formation of monopolies directly mirrored the crisis of competition in the late 19th century in the US, with the exact chronology (p. 219).

2. The larger size of firms was clearly understood by Lenin as the rationalization of production, in which he detected a "dramatic progress of socialization" (p. 222), and new technological achievements. (His analysis is sometimes contradictory concerning the effects of the rise of monopolies on technical change and growth.)

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10. G. Duménil, D. Lévy, *Le triangle infernal. Crise, mondialisation, financiarisation*, Paris: Presses Universitaires de France (1999).
11. K. Marx, F. Engels, *Manifesto of the Communist Party*, Progress Publisher: Selected Works of Marx and Engels (1848).
12. V. Lénine, "L'impérialisme, stade suprême du capitalisme" (1916), *Œuvres, tome 22*, p. 201-327, Paris: Éditions sociales (1977).
13. "If imperialism had to be defined as briefly as possible, it should be described as the monopolistic stage of capitalism." (V. Lénine, "L'impérialisme, stade suprême du capitalisme" (1916), *Œuvres, tome 22*, p. 201-327, Paris: Éditions sociales (1977), p. 287).

3. In this stage of capitalism, ownership and management were largely separated (p. 258).[14] Ownership was concentrated within finance, and distanced from production. The relationship between finance and nonfinancial corporations was central: Finance capital was dominant.

4. Another feature was the exportation of capital, which led to the sharing of the world among capitalist groups[*use the terminology of the title of section V of Lenin.*] and among the great powers[*terminology of section VI*].[15]

Lenin's rather ambiguous analysis of the transformations of capitalism during the early 20th century mirrored the transitional character of the period, from one phase to another[16]:

1. The crisis of competition in the late 19th century, with the rise of agreements to escape the rigor of competition (culminating in the development of trusts), ushered in the corporate revolution and, within the new large corporations, led to the managerial revolution. The rise of new large, more efficient, corporations was misinterpreted as mere devices to avoid competition. Lenin's analysis clearly reflected the ambiguities of this transitional process: He simultaneously considered the development of large corporations as symptoms of the "putrefaction"[*See the English term in Lenin*] of capitalism (possibly hampering innovation), on the one hand, and symbols of new organizational and technological achievements (new forms of socialization introducing to socialism), on the other hand.

2. A similar observation can be made concerning the role of finance. On the one hand, the new large finance, connected to the productive system, rendered possible the corporate revolution by providing the funds and the necessary coordination. On the other hand, it gave rise to a class of rentiers, whose conservatism accounted to a large extent for the difficulty of reforming the monetary and financial system. Only the shock of the Great Depression disrupted this social equilibrium and provided momentum to the macroeconomic revolution (about 10 years after Lenin's death).

It would be ridiculous to criticize Lenin for not having identified the *dual character* of these evolutions. In retrospect, the emphasis on monopolies and the corresponding "putrefaction" of capitalism appears, however, misleading, since it did not anticipate the ability of capitalism to recovery. But in the midst of the contruction of socialism, after 1917, it is the second aspect (the organizational and technological achievements) which was considered principal. We have shown in other works how Lenin, Bukharin, and Trotsky saw in the development of large corporations in the US a model to be imported (underestimating the social and political consequences of this importation).[17] Clearly, depending on the

14. Although, Lenin does not cite Marx, he clearly has in mind chapter 27 of Volume III of *Capital.* (K. Marx, *Capital, III, op. cit.* note 3).

15. It is not possible here to do justice to the contributions of John Hobson, Rudolf Hilferding, Rosa Luxembourg, Nikolaïs Bukharin, and others. We will just mention Bukharin's analysis of the socialization of production in Germany during World War I, which was also central in Lenin's view of the transformation of the economy in USSR.

16. These difficulties were not typical of Lenin, but common to all analysts during those years. The distinction between monopoly and size was very difficult to establish for everybody (G. Duménil, M. Glick, D. Lévy, "The history", *op. cit.* note 5).

17. G. Duménil, D. Lévy, *Au-delà du capitalisme?, op. cit.* note 1. "We did not invent planifaction. In its basic principle, it is the method used by Morgan and its business-staff (better than us) to manage its trust, *viz.*: forecasting, coordination, and direction. The difference (and it is large) is that we must apply the planning method to our "trust of trusts", that the entire Russia represents.", L. Trotski, "Rapport au 12ième Congrès du PCbR" (1923), *La lutte antibureaucratique en U.R.S.S., Tome I*, p. 25-77, Paris: Union Générale d'Édition (1975), p. 62.

context, the emphasis was placed on distinct facets of these phenomena.

The point is not to deny the relevance of the analysis of imperialism, either in the early 20th century or within contemporary capitalism. There is no doubt that many aspects of capitalism in the late 20th century reflect Lenin's analysis of imperialism. The progress of multinational corporations, the restoration of the power of finance (considerably impaired since the depression), and the new hegemony of the US (linked to the weakening of the Japanese economy) strengthen considerably the imperialist features of contemporary capitalism.

## 3.2 Internationalization and globalization

The constant tendency of capitalism to extend capitalist exploitation to the entire planet was always considered by Marx and Marxists as a crucial feature. The degrees and forms of this extension varied considerably over time, and these variations have been used as a criterion in the periodization of capitalism, often in relation to imperialism. We will not attempt here to recall the phases of this process from the Hanseatic league to the contemporary globalization of markets.

The consequences of the internationalization of production and globalization, under neoliberalism, are so conspicuous that they are often considered as crucial features of a new age of capitalism: "global capitalism". There is actually some "tension" between analysts who contend that this international character of capitalism has always been one of its basic characteristics, and those who emphasize the radical transformation during the last decades.

It is important to stress the relationship between the evolution described in section 2 and these recent trends:

1. The development of *multinational corporations* is one aspect of the "socialization" of production within large private organizations, made possible by the corporate and managerial revolutions. The specific features of competition — often described as oligopolistic — associated with these new institutions, are now apparent on a world scale.[18] The relationship between these corporations and finance is similar to that previously developed domestically.

2. A lot of confusion is created, however, by the neoliberal context in which this internationalization proceeds. What is at issue is the internationalization of capital and globalization of markets, *under the banner of neoliberalism*, *i.e.*, a particular aspect of another transition: the destruction of the Keynesian compromise and the reassertion of the power of finance. As was recalled in section 2.3, international financial mechanisms were crucial in the restoration of the leadership of finance within capitalism, and this circumstance added to the international traits of neoliberalism. Finally, the "anti-Keynesian compromise" features of neoliberalism were strong both domestically and internationationally. Domestically, the Keynesian tools (the central banks and its sophisticated monetary policy) were preserved and used to the advantage of financial interests. Internationally, finance attempted to implement the type of framework it had failed to impose after World

18. F. Chesnais, *La mondialisation du capital*, Paris: Syros (1997).

War II[19], whose effects were recently manifested in the various financial crises, while simultaneously using the institutions of Bretton Woods (the IMF in particular) to ensure the diffusion of the neoliberal order around the world.

Overall, the problem with the emphasis on the international aspect of contemporary capitalism is not that it is irrelevant: It is based on actual features of capitalism. Rather, the issue is one of hierarchy among these various elements, which can only be derived from a more general interpretation.

## 3.3 Long waves

Obviously, the profile of the profit rate displayed in figure 1 is quite evocative of long waves. The new rise of the profit rate since the mid-1980s suggests such an interpretation. A bold generalization of these observations would lead to the following proposition: The profit rate is taken into oscillations of nearly one century.

A first difference with standard long wave analysis is that we place greater emphasis, in our periodization of US capitalism, on the profile of technology and distribution than on the growth rate of output or prices. Consider figure 4 which plots the rise of the private Net Product (NP) in the US, in constant dollars, since the Civil War. With the *logarithmic scale* used in this figure, a straight line would correspond to a constant growth rate over the entire period. Indeed, this growth rate was not constant, and it is hard to imagine what fundamental law of capitalism would ensure such a constancy, but no obvious periodization is apparent as is the case for the profit rate, the labor cost, or the productivities of labor and capital.

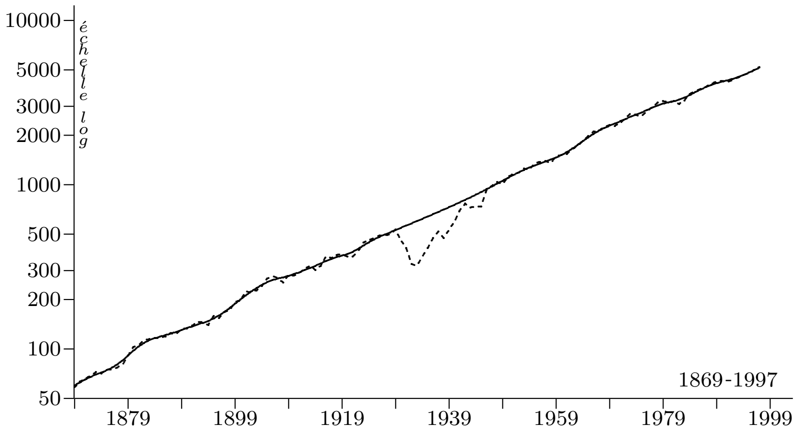
A closer examination reveals, however, that growth and accumulation are also part of the same movements as technology and distribution. Figure 5 displays the growth rate (-----) of the trend line drawn in figure 4. This variable accounts for the variations of NP, abstracting from short-term fluctuations. The figure also depicts the growth rate (——) of the trend of the stock of fixed capital in constant dollars, determined as for NP (and the trend line (·········) of this growth rate). The following observations can be made:

1. The periodization in three phases introduced in section 1.1 is actually evident in this figure, though in a less conspicuous manner than for the previous variables. Both concerning output and capital, the growth rates tended to decline up to World War I; an upward trend was then apparent, culminating during the 1960s; a new downward trend was finally observed.

2. Large fluctuations are manifested during the first phase of decline of the profit rate. It is easy to recognize the crises of the 1870s, 1890s, and the turbulence around 1907, often described as primarily "financial", contrary to what is suggested in figure 5. It is interesting to notice that both production and accumulation were affected by these fluctuations. The growth rate of the capital stock *rises* when the growth rates of output are *large*. The second of these crises, that we denote as the structural crisis of the late 19th century, was the largest, longer, and more profound. What is somehow more surprising is the vigor of the recovery at the turn of the century (which coincided with the wave of incorporation).

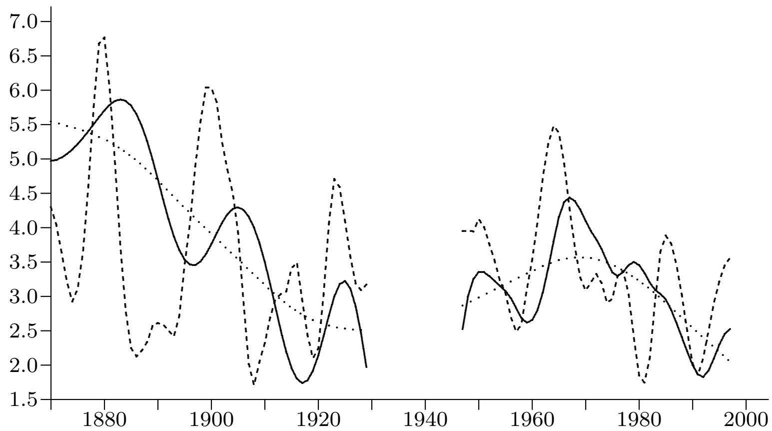
19. See the analysis of the Keynes-White plan in G.W. Domhoff, *The Power Elite and the State. How Policy is Made in America*, New York: Aldine de Gruyter (1990).

Figure 4 US private sector: Net Product in constant dollars (-----) and its trend (——) (1869-1997)




The years 1930 to 1945 have been omitted in the determination of the trend.

Figure 5 US private sector: Growth rates of the trends of the net product (-----) and fixed capital stock (——), both in constant dollars (1869-1997)




For legibility, the lines have been deleted for the depression years and World War II. The figure also displays the trend line (·········) of the growth rate of the capital stock.

Overall it is difficult to identify cycles of 40 or 50 years *à la Kondratieff.* From technology, distribution, accumulation and growth, we read out longer secular movements. Accumulation and growth before World War I reflect large 20-year cycles reminiscent of Kuznets' cycles[20].

Yes, the actual declines of the profit rate — a recurrent tendency within capitalism — led *twice* to structural crises. This mechanism is in line with Marx description of the consequences of a fall of the profit rate. But these crises created the conditions for a restoration of the profit rate, at least once, maybe twice. But one should be cautious concerning any mechanistic interpretation of these movements. The Great Depression had causes of its own, and it is not clear that these three crises were separated by the succession of an expansionary and a recessionary phase (phases A and B) à la Kondratieff.

Even if their cause may differ, recurrent structural crises define important benchmarks in the periodization of capitalism, though not in isolation, and with very specific traits. The common feature of the *three* structural crises is that they provided the conditions for large institutional transformations, and new class configurations (leaderships and compromises).[21]

## 3.4 Régulations: Fordism, before and after

The notion of *Fordism* is widely used among the left to account for the features of the first decades which followed World War II. It refers simultaneously to the favorable path of technical change, the rise of the real wage, and Keynesian policies during these years. The specific traits of the period appear even more strikingly when considered from the viewpoint of the European or Japanese economies. The catching-up with the new technical achievements in the US in the context of a large intervention of the state, was particularly dramatic in those countries, and it is not coincidental that this interpretation of the history of capitalism developed in France.

Fordism is analysed as a *régulation*, *i.e.*, a set of institutions which allows for the functioning of the system at a certain *stage* of its development. It is associated with a given *regime of accumulation*. The theory of successive régulations defines a periodization of capitalism into three or four stages in which wars and large crises play a central role[22]:

1. The description of capitalism before World War I, as competitive capitalism, is rather traditional.

2. The interwar period is viewed as transitional. Technical progress was rapid, but real wages did not rise in tandem with labor productivity; the profit rate and the profit share

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20. S. Kuznets, *Income and Wealth of the United States. Trends and Structure*, Baltimore: Johns Hopkins Press (1952).

21. As in Ernest Mandel's analysis, we believe that the movements of the profit rate are crucial in the succession of various phases. We also share the view that "exogenous", in particular political factors, play a prominent role in the starting of a new ascending phase (E. Mandel, *Long waves of capitalist development. The Marxist interpretation*, Cambridge: Cambridge University Press and Éditions de la Maison des Sciences de l'Homme (1980); and *Le troisième âge du capitalisme*, Paris: Les Éditions de la Passion (1997); see also G. Achcar, *Le marxisme d'Ernest Mandel*, Paris: Presses Universitaires de France (1999)).

22. R. Boyer, *The Regulation School. A Critical Introduction*, New York: Columbia University Press (1989).

rose to excessive levels, and a structural lack of demand ensued (underconsumption), causing the Great Depression.

3. The institutional framework of the postwar years, in particular the new "wage relation", ensured the pegging of wages on labor productivity, and demand grew in step with production. This was the age of Fordism. However, this new regime of accumulation was disturbed at some point during the 1970s, in relation of the decline of the profit rate, and the "crisis of Fordism" occurred (the structural crisis of the 1970s).

4. Post-Fordism defines a new age of capitalism, from which a new financial regime of accumulation emerges (the Régulation school's way of referring to neoliberalism). At this stage, the stock market plays a crucial role in the determination of adequate levels of demand, in lieu of the earlier wage relation.

The picture that the Régulation school gives of the first decades following World War II, the heyday of Fordism, is standard in most respects: the rapid rise of labor productivity and real wages, state intervention, the institutions of the Welfare State... Fordism refers basically to technical patterns and distribution, but the notion is provided a broad sense to include Keynesianism. Therefore, what we call, with others, the *Keynesian compromise* is also part of the picture. The discussion about Fordism should not be one of terminology. We all agree on the specific features of the first decades following World War II, on the occurrence of a structural crisis in the 1970s, and on the new age of neoliberalism.

The devil is not in the details but in the core analysis. The main problems concern the role conferred on demand by the Régulation school (the issue of "realization" in Marxist terminology, that many Marxists aslo judge crucial in the analysis of crises). They are: (1) the alleged divorce between the rapid growth of labor productivity and the slow progress of wages in the early 20th century, manifested in excessively large profit rates, and the ensuing underconsumption, and (2) the Fordist harmony between supply and demand resulting from the pegging of wages to labor productivity after World War II. We disagree with this analysis, both empirically and theorically, and as well as concerning the diagnosis of the problems of the interwar years and the specificity of the postwar years. Profit rates were beginning to rise during the 1920s, but they were not large (figure 1), and we do not accept the notion of a structural lack of demand. The prosperity after World War II was not due to an increased consumption by wage-earners. The profit rate was actually higher after the war, much larger than during the 1920s (most of the rise was transferred to the state by taxation).

Thus, two options are opened concerning the reference to Fordism:

1. Either Fordism refers to the simultaneous rapid technical progress and rapid growth of the real wage during a specific historical period, and it is descriptive. Nonetheless, in our opinion, it is misleading to use the name of Henry Ford as a symbol of the corporate and managerial revolutions, as well as of the Keynesian compromise (producing some confusion concerning the contents and dating of these transformations).

2. In the alternative, the notion conveys a particular *analytical* content: The idea that the inadequate rise of wages in the 1920s caused the depression and that the rise of wages contributed to the growth and stability of the economy after World War II, in the US and within leading capitalist countries. Although Ford did not increase wages in order to raise demand levels, the reference to Ford is more relevant, since both technical change and distribution are at issue, but the diagnosis of the causes of the depression is erroneous.

Globally, the problem with the Régulation school is not one of *periodization*, but one of *economic theory*.

# 4 - Relations of production, classes, and domination

Indeed, the changing course of technology and distribution, and the succession of distinct institutional settings are crucial in the periodization of capitalism. This applies to the analyses of sections 1 or 2, as well as to section 3 which provides some elements of the comparison of this analysis with other approaches. However, in our opinion, these analyses remain limited.

The present section takes a further step. A preliminary section recalls a few basic principles concerning Marx's analysis of relations of production, modes of production, classes, and our interpretation of the *Communist Manifesto* (section 4.1). Then, we apply this framework to the 20th century. We contend that the evolution of capitalism since the late 19th century mirrored a gradual evolution of relations of production and class patterns, that had been theorized in the past as the emergence of *managerial capitalism* (section 4.2). We believe this interpretation of the evolution of capitalism is still relevant. There are new postcapitalist relations of production emerging within capitalism, new class patterns, and a new class contradiction. We supplement this analysis by considering the succession of large historical junctures, in which particular segments of the ruling class(es) dominate and particular compromises are established (section 4.3).

## 4.1 History: A Marxist framework of analysis

In the *Communist Manifesto*, Marx and Engels devoted considerable space to the analysis of the transition between feudalism and capitalism. Capitalist relations of production emerged from within feudalism. Very little was said concerning the role played by the masses in this process. The bourgeoisie was described as a revolutionary class, gradually upsetting feudal social relations, and finally overthrowing the political apparatus of the former ruling class (after a long process of transformation of the ruling class itself and of the state). The way Marx and Engels described the transition from capitalism to socialism was thoroughly different from this description of the rise of capitalism. Capitalism was said to simplify social patterns, and only two antagonistic classes, the bourgeois and proletarian classes, would come to confront one another. Capitalist relations of production provoked a huge development of productive forces and socialization of production, but the bourgeoisie could not control the social forces that it had aroused. This inability was manifested in larger and larger crises, and the outcome had necessarily to be a revolution. Contrary to the transition between feudalism and capitalism, this revolution was not supposed to end in a switch in power from one ruling class to another, but in the emergence of a classless society under the leadership of workers.

History did not confirm these views. Our interpretation is, however, neither that capitalism represents the ultimate stage of the maturation of human society nor that the "true" proletarian revolution was simply postponed. Not only the struggle for the elimination of classes must remain on our agenda, but history is, indeed, still moving ahead. *A new transition, similar to the one between feudalism and capitalism, is underway. It will lead to a postcapitalist order, with a new managerial ruling class.* This thesis has repeatedly been put forward in various contexts in refutation of Marxism. We believe time is now ripe for a *Marxist* formulation of this view.

A second aspect of Marx's analysis — concerning classes, class struggle, and the state — is also crucial in our interpretation of the contemporary transformations of capitalism: A succession of quite distinct "regimes" paralleled the historical development of capitalism, as the expression of specific power configurations.

The possible hegemony of one fraction of ruling classes was quite explicit in Marx political work. For example, in the *18th Brumaire*, Marx analyzed the succession of various regimes in France in the 19th century — Restoration, Monarchy of July, Republic — corresponding to the domination of various fractions of ruling classes or of the bourgeoisie as a whole: aristocracy (already bourgeois), finance and great industrialists, and bourgeoisie in general.[23] Neither the Restoration nor the Empires stopped the progression of capitalist relations of production in France, though they considerably influenced their development. In spite of significant differences, it is still within this framework that the contemporary development of capitalism must be analyzed.

## 4.2 Managerial capitalism: New relations of production and class patterns

Several aspects of the evolution of capitalism since the late 19th century must be interpreted as actual *transformations of relations of production*. This section first focuses on changes affecting production and the accumulation of capital, interpreted successively in terms of transformations of relations of production and class patterns. Then, two other types of changes are briefly examined, concerning: (1) the centralized control of monetary and financial mechanisms, hence of the macroeconomy, and more generally economic state intervention, in which the relationship between finance and other fractions of ruling classes are at issue, and (2) other social tasks, such as education or research, in which scientific, managerial, and clerical personnel of the public sector are involved.

We begin with production and accumulation, which obviously are crucial in the definition of relations of production and class patterns:

1. *The separation between ownership and management.* The emergence of large corporations at the turn of the century and the corresponding separation between finance and managerial personnel represented a fundamental shift in the capitalist ownership of the

23. "This bourgeois mass was, however, royalist. One section of it, the large landowners, had ruled during the Restoration and was accordingly Legitimist. The other, the aristocrats of finance and big industrialists, had ruled during the July Monarchy and was consequently Orleanist. The high dignitaries of the army, the university, the church, the bar, the academy, and the press were to be found on either side, though in various proportions. Here, in the bourgeois republic, which bore neither the name Bourbon nor the name Orleans, but the name capital, they had found the form of state in which they could rule conjointly.", K. Marx, "Le 18 Brumaire de Louis Bonaparte" (1852), *Œuvres IV, Politique I*, p. 431-544, Paris: La Pléiade, Gallimard (1994), p. 455-456.

means of production, *i.e.*, the metamorphosis of a crucial aspect of relations of production.[24] Private ownership was not destroyed, but a considerable distance was created between the owners and the management of the firms. The functions of the "active capitalist" were delegated to salaried workers.

2. *The social pattern of ownership.* The ownership of the means of production became more and more concentrated within financial institutions, under the aegis of large capitalists. These institutions controlled the funds of a large population of anonymous holders of securities. The delegation of management to salaried personnel, described above, also occurred within these financial institutions. This broad set of institutions, their specific relationships to large capitalists and small holders, and their upper management define the contours of a social entity labeled *finance*.

3. *The hierarchy of wage-earners.* Correspondingly, several divisions are apparent within salaried wage-earners:

(a) Between productive workers, on the one hand, and managerial and clerical personnel, on the other. More than ever, the workers were compelled to produce according to rules defined and controlled by managerial and clerical personnel. The distance created by capitalist production between the workers and production means widened considerably.

(b) Within the managerial personnel, initiative was concentrated in the hands of the upper fraction of the group, and execution at the bottom. This is an additional alteration of relations of production affecting one aspect of the prerogatives of the owner: the control of the valorization of his/her capital.[25]

Parenthetically, Marx clearly anticipated these events.[26] He saw in the separation between ownerhip and management, and the new forms of ownership, a preliminary step toward the collective ownership of the means of production.[27]

To this evolution of relations of production, we associate the emergence of new class patterns. Two class contradictions are at issue which correspond, respectively, to the old capitalist framework and to the new managerial features:

1. The traditional capitalist opposition between *capitalists* and *workers*:

(a) From this viewpoint, managerial and clerical personnel—from the top to the bottom of the hierarchy—assume the traditional functions of the individual active capitalist as manager of his/her firm.

(b) Also from this viewpoint, smaller holders of securities share some aspects of the condition of large capitalists, though in a subordinated fashion.

2. The new opposition between *managerial personnel* and the new dominated class of *"managed" personnel*, by which we mean clerical personnel and production workers.

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24. John McDermott emphasizes this transformation of relations of production putting more emphasis on the corporate form of ownership. J. McDermott, *Corporate society: Class, property, and contemporary capitalism*, Boulder: Westview Press (1991).

25. More precisely, the maximizing of the profit rate which requires the control of the valorization process, in the strict sense, and of the circulation process.

26. K. Marx, *Capital, III, op. cit.* note 3, ch. 27.

27. "This [*the development of joint-stock companies*] is the abolition of the capitalist mode of production within the capitalist mode of production itself, and hence a self-abolishing contradiction, which presents itself *prima facie* as a mere point of transition to a new form of production." (K. Marx, *Capital, Volume III*, New York: First Vintage Book Edition (1894), p. 569).

The complexity of contemporary class patterns is the expression of the dialectical coexistence of the two above contradictions.[28] A single person can belong to the upper and lower fractions of each contradiction. For example, an engineer can be part of the collective worker within the workshop and belong to *management*.[29] The rank-and-file accountant performs a capitalist task, but is clearly part of *"managed" personnel*. The separation between white and blue collar workers still echoes the distinction between clerical personnel and production workers among the new dominated class, but it is gradually loosing its relevance. The holding of securities also contributes to bluring the demarcation.

Within contemporary capitalism, there is some overlap between the two ruling classes, the old and the new. An "interface" exists between ownership and management. This is the world of top management and boards of directors, where owners still engaged in some form of management interact with managers subsidiarily owners. This interface is essential to the preservation of capitalist ownership in a system where ownership and management are basically separated.

The managerial shift primarily affected firms and the way social production is performed, but the new control of monetary and financial mechanisms, and, thus, of the macroeconomy, defines another expression of a similar evolution. The agents of this control of the macroeconomy are officials, acting within the administration and government agencies. This control can be interpreted as a second "managerial revolution", independently of its actual targets, full employment or price stability.

It is important to understand in what respect the control of monetary and financial mechanisms affects capitalist relations of production, and why this control represented such a crucial — political — issue in the evolution of capitalism. Credit and the corresponding issuance of money is directly related to the *accumulation of capital*. The preliminary saving of profits is not a prerequisite to capital accumulation, and the total amount of capital invested within firms — which is held simultaneously under its three alternative forms (productive capital, commodity capital, and money capital) — can be increased by credit. In a nutshell: Credit creates capital. As is well known, excess credit can provoke inflation and devalue the stock of debts, *i.e.*, the capital of lenders.

Finance always considered as one its basic prerogatives the control of these mechanisms. That the state may interfere with monetary and financial mechanisms was viewed by finance as eroding a crucial aspect of capitalist ownership — even within the limits of the Keynesian compromise, where only the total volume of credit was at issue, not its allocation among various industries and firms. This control of the macroeconomy was, however, a crucial conquest of modern capitalism, which, in the formulation of the *Communist Manifesto*, aroused forces that it was unable to tame.

We will not discuss here other, similarly crucial, aspects of state intervention in the economy. The attitude of capitalists toward the direct involvement of the state in Europe or Japan, in particular, always remained ambiguous. In these countries, it was welcomed, or simply tolerated, during the first decades of *catching up* with the US.

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28. G. Duménil, D. Lévy, "The Emergence and Functions of Managerial and Clerical Personnel in Marx's Capital", *in* N. Garston (ed.), *Bureaucracy: Three Paradigms*, Boston: Kluwer Academic, 1994, p. 61-81.
29. Actually, this engineer is involved into some components of productive labor (such as conception, coordination or control), as the active capitalist used to be.

A last feature of the evolution of capitalism was the gradual extension of the process of "socialization", that we mentioned earlier, beyond the limits of strictly *economic* mechanisms with respect to education, health, police and other forms of social control. These tasks have always been at issue in human societies. Specific frameworks were defined within each mode of production, and evolved over time. Within contemporary societies they have reached new degrees. Their concrete analysis lies beyond the limits of the present study, and we will only stress here their double *capitalist* and *managerial* feature: (1) The way these "social" functions are performed within modern capitalism expresses the necessities of the *reproduction* of the system as capitalist[30]; (2) These functions are also part of a broader process of socialization overstepping the limits of capitalism. In both instances, and independently of their more or less "democratic" or "elitist" features, they echo the managerial transformation of our societies, and the tasks of managerial and clerical personnel. From the point of view of class patterns, the personnel in charge of these functions is close to business staffs, although with specific traits.

Thus, the use of the expression *Managerial capitalism* in this study is broader than what is (or used to be) meant by it, since it purports to encompass all aspects covered above, with their dual determination. Managerial capitalism is a hybrid social formation combining specifically capitalist traits and a new managerial logic which foreshadows a new mode of production. Thus, two distinct social "logics" can be detected within contemporary societies: (1) the traditional capitalist rules of the game, the maximizing of the profit rate as basic principle, and the private (though collective) ownership of the means of production, and (2) new forms of socialization within firms, financial institutions, and outside, which progressively transcend the limits of private ownership, ensuring more and more cooperation and coordination beyond the large antagonistic features of the system.

## 4.3 Ruling classes and class compromises

The reference to relations of production defines a first fundamental level of analysis in the interpretation of the history of capitalism, and there is a straightforward correspondence between these transformations and those of class patterns. There is, however, a second level of analysis, more political and directly related to the state, from which their evolution must be considered. It is that of power relationships, either the leadership or domination of a particular class or fraction of class, or the existence of given compromises within the various components of the ruling class(es). This notion of *class compromise* can be extended even further to include other intermediate classes, or workers themselves. In this broad sense, it accounts for the configurations in which class power is exercised in general, which combine violence and conciliation.

Within contemporary "democracies", the regimes do not necessarily change with the succession of leadership and compromises, but mechanisms are at work, similar to those described by Marx in his historical analysis of capitalism. The notion of "regimes" itself is too narrow, and it would be more appropriate to resort to broader concepts such as large *power configurations* or *junctures*.

In the US since the Civil War, and in other major capitalist countries with significant qualification, three such junctures can be identified:

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30. A. Bihr, *Entre bourgeoisie et prolétariat. L'encadrement capitaliste*, Paris: L'Harmattan (1989).

1. The coexistence of the new finance and managers in the wake of the separation between property and management at the beginning of the century, under the hegemony of great financiers (Morgan, Rockefeller, etc.), and the compromise with traditional capitalists.

2. From the Great Depression to the beginning of the 1970s, the setback of finance (limited in its scope), the increased autonomy of managerial personnel (both in the private and public sectors), and the compromise with the workers.

3. The reassertion of the power of finance within neoliberalism, the dissolution of the compromise with the workers, and the reduction in the autonomy of managerial personnel, within firms and within the state.

It is therefore clear that the transformations described in sections 1 and 2 are determined to considerable extent by *class struggle*. Both the confrontation between dominated classes and ruling classes, and the internal contradictions within ruling classes, are at issue. In the presentation of the various episodes of these confrontations, it is, however, difficult to draw a definite boundary between the emergence of the managerial features of 20th century capitalism, on the one hand, and the specific content of the Keynesian compromise, on the other hand. The way these various elements were combined is not coincidental, *since the managerial transformation of capitalism in the 20th century was made possible by the same social tensions which led to the social compromise*:

1. The various fractions of ruling classes utilized the workers' movement in their own fashion. First, during the Progressive Era, prior to World War I, the owners of traditional firms used the hostility of workers toward trusts to obtain a conservative legislation (the antitrust legislation), but they simultaneously resisted workers' pressures toward better working conditions, unionization, and improved living standards. Then, a significant fraction of the owners and managers of the great corporations began to compromise with workers in these respects (in combination with the repression of the more radical segment of the labor movement, in particular during World War I). This compromise played an important role in the rise to dominance of large corporations. Many traits of the so-called "Keynesian" compromise belong to this early period. Thus, the rise of the managerial corporation simultaneously utilized the labor movement and contributed to the establishment of the Welfare State after World War II.[31]

2. Although the managerial central control of financial mechanisms and of the macroeconomy can be used by any dominating fraction of the ruling classes according to its own interests, it is clear that the institutions of Keynesianism were originally targeted toward full employment. Thus, these new institutions of capitalism not only affected ownership and accumulation, but also the nature of *wage labor*. Within capitalism, labor power is basically treated as a *commodity*, with its use and exchange values. It is purchased according to the needs of capitalist production, and paid as it is used. Any step toward the recognition of a *right to work* or of a *right to dispose of a certain income*, independently of the demand from capitalists, modifies the "conditions" of salaried labor. These conditions define another aspect of relations of production. This quite specific evolution of wage labor was not inherent to managerialism, but resulted from the political conditions in which the new managerial society was asserted, and this accounts for the precarious character of these social conquests.

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31. J. Weinstein, *The Corporate Ideal in the Liberal State, 1900-1918*, Boston: Beacon Press (1968).

3. The same convergence between the managerial transformation of the economy and the social compromise was also manifest concerning other features of the first half of the century. The development of the institutions in charge of education and research is one expression of the requirements of mature managerial capitalism (in which the availability of educated people is crucial). In certain (also precarious) configurations, they correspond to actual improvements of the conditions of workers, part of the social compromise. This was historically the case, as a result of the political circumstances in which the development of these institutions was performed.

We will not discuss here in more details the various episodes of the emergence of managerial relations of production within capitalism and their relation to classes and power. Our overall interpretation can be summarized in three propositions:

1. A key element in the interpretation of the evolution of modern capitalism is the recognition of the central role played by the reaction of capitalists to the emergence of a new mode of production more in line with the progress of productive forces, in which their property would be superseded. The resistance of capitalists to this evolution becomes periodically manifest, as (1) in the fight of traditional capitalist owners against the rise of the new large corporations, (2) in the widespread opposition of all groups of capitalists to the increasing intervention of the state in economic affairs up to the Great Depression, and (3) in the rise of neoliberalism.

2. Fractions of ruling classes are, however, also periodically the promoters of large transformations. Thus, the corporate and managerial revolutions can be interpreted as attempts to make compatible the socialization of productive forces and the private ownership of the means of production. The same was true of the control of the macroeconomy and state intervention, although the transformation of relations of production underlying this transition was "biased" during a few decades in the Keynesian compromise. This "bias" was later corrected in neoliberalism, but the same tensions and stakes are still at issue.

3. Neoliberalism can be interpreted as an attempt by the owners of the means of production to *reserve* the alliance between managers and other salaried classes in the Keynesian compromise toward a new alliance between themselves and managers (in particular, the upper fraction of management). Since they could not simply perpetuate their rule under its traditional forms, *i.e.*, freeze relations of production, they fought to promote a transition preserving their privileges as much as possible, and finally allowing them to "merge" rather painlessly with the new ruling class.[32]

Consider each of the three "configurations" recalled at the beginning of this section. When the progress of productive forces required new forms of socialization of production, in the late 19th century, ownership was separated from management, and management was delegated to salaried workers. Although early forms of compromise emerged during the Progressive Era, finance remained in power. The depression compelled capitalists to further enlarge the prerogatives of management, with the quite specific features of the Keynesian compromise, and to accept considerable new shifts in relations of production. (All the components of the Keynesian compromise, in the broad sense of the terms, were at issue: macroeconomics, mergers, mobility of capital, autonomy of management, Welfare State...). This period strengthened considerably the role of the state. The structural crisis

32. As, in the transition between, feudalism and capitalism, the former ruling class transformed itself in a class of agrarian capitalists, financiers, or businessmen.

of the 1970s provided the circumstances for a new *coup* against the workers, allowing for the reassertion of the power of finance. Actually, as we will contend in the following section, finance provoked a major inflection in the managerial evolution of capitalism, more that it actually stopped it.

# 5 - Can neoliberalism stop history?

This section discusses the implications of neoliberalism concerning the history of the last century of US capitalism in this study. This interpretation emphasizes the managerial traits of contemporary capitalism and their gradual emergence, and seems to be contradicted by recent developments. As can be expected, the fate of the theories of managerial capitalism was determined by the course of capitalism, the succession of the corporate and managerial revolution in the early 20th century and the Keynesian compromise. The rise of neoliberalism was fatal to the theory of managerial capitalism (section 5.1). We contend, however, that neoliberalism created, in combination with the reassertion of the maximizing of the profit rate, the conditions for a third managerial revolution affecting the allocation of capital (section 5.2). A last section provides the outline of a discussion of the impact of neoliberalism, its "costs and benefits" (section 5.3).

## 5.1 Neoliberalism v. managerial capitalism

The ups and downs of the theory of *managerial capitalism* reflect the transformations of capitalism itself. From its earliest stages, the development of capitalism promoted the application of science to production and organization. Thus, premanagerial and, later, managerial interpretations developed since the 18th century, often with a highly utopian content, and leaning toward socialism. Obviously, the managerial revolution in the early 20th century considerably strengthened this movement, later stimulated by the Great Depression, World War II, and the Keynesian compromise. It culminated during the 1960s or 1970s, with the much celebrated work of Kenneth Galbraith. Researchers remained, however, active in the field even later.[33]

In the early theories of management, managers were identified with a new form of "rationality", above classes. This was in particular the case in the US during the first years of the managerial revolution, when Adolf Berle and Gardiner Means described managers as a "neutral technocracy".[34] The theories which developed during the Keynesian compromise were not very different in this respect (though more ambiguous): This managerial capitalism had superseded business fluctuations and provided the workers with a larger

33. A. Berle, G. Means, *The Modern Corporation and Private Property*, London: Macmillan (1932); J. Burnham, *L'ère des organisateurs* (1941), Paris: Calmann-Lévy (1969); A.D. Chandler, *The Visible Hand, op. cit.* note 6; J.K. Galbraith, *The New Industrial State*, London: Penguin Books (1969); T. Parsons, *Essays in Sociological Theory, p. 323-355*, Glencoe: The Free Press (1954); T. Veblen, *The Engineers and the Price System* (1921), New Brunswick: Transaction Books (1983).
34. A. Berle, G. Means, *The Modern Corporation, op. cit.* note 33.

purchasing power and social protection. The views developed in socialist countries, notably in USSR during the same years, were actually in line with this assessment. Managers have, however, also been depicted alternatively as a new ruling class and as the disciplined agents of capitalists. We believe that: (1) managers are not above classes; (2) they have a potential for autonomy; (3) they are dominated by capitalists; (4) their actual power depends of the succession of *social configurations* in which their class power is expressed.

Did the rise of neoliberalism kill the theories of managerialism? Many aspects in the contemporary course of capitalism apparently contributed to the obsolescence of these theories. Too many basic capitalist features have reemerged: the maximizing of the profit rate in the interest of finance, the rise of interest rates, the control of the rise of wages, the subordination of workers, deregulation, etc. The capitalist nature of our societies seems so unquestionable that it hides the identification of the emergence of new relations of production.

It is also obvious, however, than the role of managerial and clerical personnel is more critical than ever. Rather than a setback in the evolution of the relations of production or class patterns toward a premanagerial stage of capitalism, what is at issue within neoliberalism is *power*: the new hegemony of finance, *i.e.*, within contemporary capitalism, of capital. Thus, we must confront the following paradox: Our societies continue their movement along a managerial path under a new, strengthened, leadership of capital. Note that this leadership is not neutral. On the contrary, as suggested earlier, it directs the present evolution along one among several possible paths, away from the earlier gradual enlargement of state intervention and the conquests of the workers, toward new forms of "socialization" under the aegis of large corporations and, more generally, "private" interests.

## 5.2 A third managerial revolution?: Capital allocation after management and macroeconomics

The managerial transformation of capitalism proceeds in a stepwise fashion. In the US, the first revolution affected the organization of production and firms in general during the early 20th century; the second touched the control of the macroeconomy in the wake of the depression and after World War II. As already noted, neoliberalism did not basically reverse these developments. Instead, the managers of firms were reminded of the quasi-uniqueness of the criterion of their action, the *maximizing of the profit rate*, independently of its social costs, and policies were targeted toward the stability of prices.

There are, however, two basic aspects to the maximizing of the profit rate. Organization and technology within firms define a first component, and *the allocation of capital among industries and firms*, a second component. In this latter respect, the crucial issue, in addition to the capacity to collect funds (the issuance of shares and borrowings), is the determination of relative profitability in the present, as well as the assessment of future prospects. Like macroeconomics, this task goes beyond the limits of individual nonfinancial corporations. This is where the central role of finance was preserved during the managerial revolution of the early 20th century.

Obviously, there is nothing radically new within neoliberalism, and the managerial revolution affected finance long ago. Financiers were surrounded by business staffs from the first stages of the emergence of modern finance at the turn of the century. Within contemporary capitalism new steps have, however, been accomplished.

There is a broad variety of paths along which this evolution can proceed, and which are not exclusive:

1. State intervention used to be considered as crucial in the definition of long-term orientations (industrial policy, research, financing of specific industries, direct involment of the state, regulations...).

2. Finance has grown in considerable proportions. For example, prior to the Japanese crisis, the *Keiretsus* were seen as advanced and efficient forms of organization and concentration.

3. Progressively, even nonfinancial corporations extended and diversified the field of their activities, thus participating, under managerial control, to the mobility of capital among industries, and developing their financial activity *per se*. The strategic decisions are now made within large corporations.

4. New institutions, such as mutual and pension funds, now hold a broad fraction of financial investments.[35] They perform this function of allocating capital among industries and firms; they compare profit rates; and they judge the performances of business staffs. Any negative assessment of a firm results in a movement away from its stocks, and it becomes more and more difficult and costly for the firm to obtain new financing.

Mutual and pension funds are typical of the new institutions of neoliberalism. From the viewpoint of relations of production, they are, in our opinion, ambiguous:

1. Imposing profitability norms to enterprises on the behalf of shareholders, they reassert a basic capitalist trait of our societies. Relying on *market mecanisms*, they also strengthen traditional capitalist features.

2. Conversely, they also contribute to the emergence of a new form of capitalism without large capitalists, *i.e.*, without large individual shareholders, even if this statement is sometimes grossly exaggerated. Some analysts are so impressed by the impersonal features of this new form of capitalist ownership that they interpret the rise of funds to dominance as a true metamorphosis of capitalism, somehow beyond itself. There is no doubt that these "institutional investors" represent a new opportunity for managers to express their skills, but it is not clear that the barriers between capitalists and wage-earners are gradually eroded.

Overall, an important managerial aspect of neoliberalism is that managers are now acting within large collective institutions, upstream traditional financial and nonfinancial firms. It is probably justified to denote this step as a third *managerial revolution*, a centralization of capital giving to ownership a new social content, but it is too early to grasp the nature of the new network of social relations which will emerge from these developments.

The limitation of this "socialization" is that it is now subject — as is the control of the macroeconomy — to the fundamentally capitalist criterion of the maximizing of the profit rate in a new context freed from the commitments of the Keynesian compromise. This follows from the present hegemony of finance which determines the path along which the managerial skills of the new class must be expressed. But this restriction does not change the content of this evolution, *viz.* that managers are conquering, in present days capitalism, a new capability: the control of the allocation of capital and of the performance of firm

35. In the US, in 1998, the ratio of corporate equities held by mutual funds and pension funds, taken together, to those directly held by households is 1.02.

management at an unprecedented level of centralization. It is important to understand both the considerable implications of these achievements as well as their strict limitations imposed by capital: (1) The capability to centrally handle very large amounts of resources and decide on their utilization, comparing the performances of various managerial staffs; (2) The strict subjection to the profit rate criterion.

The maximizing of the profit rate offers certain guarantees concerning the efficient use of resources, but its limitations have been often emphasized: (1) This criterion has been criticized on account of its blindness vis-à-vis other phenomena, social, human, ecological, etc.; (2) At a more sophisticated level of analysis, it appears that it pushes our societies along a specific historical trajectory that it, itself, generates — and which will be hard to reverse (specific consumptions, ways of life, and culture...). Neoliberalism does not stop history, but determines it *present*, and bias its *future*.

## 5.3 Costs and benefits of neoliberalism

As stated in section 1.3, a new phase seems presently underway with an upward trend of the profit rate since the mid-1980s. The relationship of neoliberalism to this new phase is a politically crucial issue — difficult to settle.

It is first obvious that the dramatic rise of real interest rates during the 1980s delayed the recovery of the profit rate as directly experienced by firms, *i.e.*, after the payment of interests (and all taxes). This transfer must, however, be assessed in comparison to earlier decades. This is done in figure 6 which displays the profit rate for the nonfinancial corporate sector.[36] This profit rate is the ratio of a measure of profits after interest and tax, corrected for the devaluation of debts by inflation, to a measure of capital, the net worth of corporations. The following comments can be made:

1. The difference between the profit rate in the definitions used in figures 3 and 6 is striking. As a result of the difference in the definition of the profit rate, the level is lower. (Only part of the difference is due to the distinct sectors considered, the total nonresidential private sector and a restricted corporate sector.)

2. During the 1970s, in relation to the large levels of inflation, *real* interest rates were very low if not negative. From this originated a considerable transfer of wealth from lenders to borrowers.[37] This effect was so large that it actually compensated for the decline of the profit rate. It is this transfer which explains the existence of a bulge during the 1970s as large as that apparent during the 1960s, instead of a decline (figure 6).

3. The rise of interest rates during the 1980s and the eradication of inflation put an end to this reprieve, and the profit rate fell sharply in the early 1980s. In this respect, the

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36. From which we exclude four industries accounting for 6% of the net product of the nonresidential private economy, which hold huge amounts of fixed capital, and whose profit rate is extremely low. These industries are *Oil and gas extraction*, *Railroad transportation*, *Pipelines except natural gas*, and *Electricity, gas and sanitary services*. See G. Duménil, D. Lévy, Profit rates: Gravitation and Trends,
http://www.jourdan.ens.fr/levy/dle1999e.pdf, Cepremap, Modem, Paris (1999).

37. The case of France is treated in G. Duménil, D. Lévy, "Coûts et avantages du néolibéralisme. Une analyse de classe", *in* G. Duménil, D. Lévy (eds.), *Le triangle infernal. Crise, mondialisation, financiarisation*, Paris: Presses Universitaires de France, 1999, p. 205-225 (extended English version: "Costs and Benefits of Neoliberalism. A class analysis", *Review of International Political Economy*, 8 (2001), p. 578-607).

situation during the 1980s was the exact opposite of that prevailing during the 1970s: The flows of wealth between lenders and borrowers were reversed.

4. The effects of the recent recovery are now apparent. They are the combined result of the new course of technical change, stagnating labor costs, lower real interest rates, and declining indebtedness. However, the profitability levels of the 1960s and 1970s have not been reached.

Figure 6 Profit rate: the effects of taxes, indebtedness, interests, and inflation (1952-1997) *(b)*


The sector is the nonfarm, nonfinancial *Corporate sector*, excluding a group of extremely capitalistic industries (accounting for 6% of the net product of the nonresidential private economy). Profit rate = (Net product − Labor compensation − All taxes − Net interests + Correction for inflation)/Net worth.

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*(a)* This figure is borrowed from G. Duménil, D. Lévy, Profit rates: Gravitation and Trends, http://www.jourdan.ens.fr/levy/dle1999e.pdf, Cepremap, Modem, Paris (1999).

The negative impact of high real interest rates has been often documented and, as is widely acknowledged, the policy shock of 1979 added to the crisis in the 1980s, whereas lenders actually benefited from this movement. Nonfinancial enterprises had difficulty alleviating the burden of interest (net interests, since firms are simultaneously lending and borrowing), but they eventually performed it, stimulating the dramatic rise of the stock market whose role is now central. The costs of neoliberalism were very large, and the consequences on investment and employment of the encroachment on profitability levels described above defines only one aspect of these costs.

The fundamental issue is, however, the alleged advantages of neoliberalism in relation to these costs. A first obvious answer can be formulated concerning the control of the cost of labor and deregulation, which clearly benefit finance. But the question can be posed, at a broader level of analysis, of the potential "progressivity" of neoliberalism. How much of the new trends of technology can be imputed to neoliberalism? *How much of the new possible phase of capitalism?* The problem can also be framed counterfactually: If policies had been different — think of a "left" alternative better adapted to the structural crisis than Keynesianism — would the upward turn of capital productivity have occurred? When? Earlier or later? What would have been its amplitude and effects?

Needless to say that we will not answer these questions adequately. A brief comparison with the unique exemple of a similar upturn that we know of, that of the early 20th century, can, however, provide some crucial insights into these complex phenomena. The similarity between the two historical circumstances is very large.

Consider first the role of finance in the transformation of firms, technology and management. The corporate and the managerial revolutions required the combined actions of: (1) managerial and clerical personnel, and (2) finance. The former made possible the acquisition of the new efficiency within corporations, and the latter provided the funds allowing for the constitution and growth of the new large corporations. A similar twofold process is underway since the 1980s. Finance supports the present merger wave, and new managerial achievements are performed by managerial and clerical personnel, probably supported by the so-called information revolution.

Consider now income and stability. Another characteristic feature of the early 20th century was the hegemony of finance concerning the control of the macroeconomy and the preservation of monetary and financial stability. The failure of finance to measure up to this task contributed to the depression and, after the depression, allowed for the rise of the public component of managerialism within Keynesianism. This is where the damaging aspect of finance is at issue, both in terms of income and concerning instability. (Recall that Keynes suggested the euthanasia of the rentier.) In present days capitalism, finance again delayed the establishment of the new institutional framework required by the preservation of the monetary and financial stability of the international economy or forbade the utilization of existing international institutions to this end, and, even, promoted dangerous procedures (as had been the case during the 1920s). The recent financial crises clearly document the potential of this threat, and account for the new stimulus to impose some controls. The historical experience of the Great Depression has, however, not been forgotten, and the new institutions built after World War II have been only partially destroyed (only part of Bretton Woods was dismantled). Despite neoliberalism, contemporary capitalism is still a *managerial* capitalism, and its *managerial component* can be suddenly or gradually pushed to the fore — as is probably now the case — if required for the continued stability of the system.

In our opinion, it is very unlikely that the capitalist class will disappear from the scene as a result of its excess rigidity causing a major economic collapse. It will rather "merge" with the new rulers. This explains why the contemporary forms of the transition, in particular its more or less pronounced private or public features, are so important to this class. This is what neoliberalism is about: the forms and exact contents of a transition.

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