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## THE ECONOMIC CRISIS OF COGNITIVE CAPITALISM VIS-À-VIS TO THE ECONOMIC CRISIS OF FORDIST CAPITALISM IN THE THIRTIES: IS NOWADAYS A "KEYNESIAN NEW DEAL" POSSIBLE?\*\*

### 1. Introduction

The aim of this paper is to present a first attempt of comparative analysis between the present economic crisis and the 1929 crisis, by focusing not on the point of view of the theoretical backgrounds, but, overall, on the political and social implications.

Many analysts and economic researchers have pointed out how it is time to reconsider a Keynesian perspective after three decades of dominance of neoliberalism<sup>1</sup>.

Trivially, Keynes' political suggestions are often reduced to the merely State intervention in order both to inject liquidity to the economic system and to stimulate the recovery of consumption and production. The mainly idea is based on the

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<sup>&</sup>lt;sup>1</sup> In Italy, it was proposed to award the 2008 Nobel Prize for Economics to J.M.Keynes: see. www.sbilanciamoci.info.

traditional Fordist framework, according to which production and consumption generates wealth thanks to the role played by saving, which is able to finance investment activity through either the indirect channel of credit intermediation or the direct channel of financial markets:

The logical framework of neo-liberal Keynesian perspective, starting from a disequilibrium approach, can be summarized as follows<sup>2</sup>:

Labour and credit market exchanges  $\rightarrow$  Investment and production  $\rightarrow$  Consumption and saving  $\rightarrow$  Finance to new investment and production either through credit or through financial activities.

According to this framework, the role played by financial markets is simply reduced to saving intermediation. Hence, the destination of saving represents the discrimination between productive investment or financial unproductive investment activity. If saving is more used to finance speculation activity than to production, then it is possible the rise of speculative bubbles with the results that we all know. This very rough explanation of the current crisis is based on two implicit hypothesis:

- a. the present economic system is structurally the same of that of 50 years ago, when it occurred the 1929 crisis;
- b. it is necessary to come back to regulatory tools, able to redefine a better and equilibrated relationship between State intervention and free market dynamics.

And it is starting from this point of view that it is necessary to reconsider Keynes and the economic implications he made as far as "new deal" policy was concerned.

In this paper, we shall argue that the policy suggestions by Keynes (para 2) should be re-interpreted in a different way, according to the structural changes which occurred in the passage from the industrial-fordist paradigm (para. 3) to the cognitive-flexible one (para 4). These changes leads to different political conclusions, which show to the impossibility to define a new deal for the present crisis (para 5).

<sup>&</sup>lt;sup>2</sup> One for all, see O.Blanchard, *Macroeconomics*, Prentice Hall, New Jersey, USA, 2008

# 2. A step behind: Keynes on the distribution of income and economic instability

The innovativeness of Keynes's economic thinking lies mainly in his method of economic analysis, which in part recalls the classical economics of Smith, Ricardo and Marx. In Keynes's view, a fertile and reciprocal relationship with other social sciences, and the central role of historical development, are the tools which enable the researcher into social phenomena to understand relations of economic interdependence; the analyst should focus on formal facts, and should identify the main nexuses of cause and effect, viewed systemically and dynamically, avoiding comfortable and instrumental theoretical abstractions which claim for themselves a scientific validity which by definition they cannot have.

In the academic environment Keynes had to address the dominant economics of Marshall, from which he himself had absorbed the microeconomic formulation of the theory of marginality. What Keynes understands is that this formulation could never provide a general theory for the operation of the economic system for as long as it remained tied to the analysis of individual behaviours. Aggregate analysis, which with Keynes comes to be called macroeconomics, is not simply an adding together of the behaviours of single individuals. In the passage from the micro to the macro, analysis has to take account of the entry onto the scene of new economic variables independent of the simple analysis of the operation of market exchange, following generalisations deriving from the Walrasian approach. And it is only through macroeconomic analysis that it is possible to understand the phenomena of structural change<sup>3</sup> which were taking place in those years, with the advent of Taylorism and Fordism, and which the majority of academic economists and political and social commentators were not capable of grasping, caught up as they were in analysis of the micro-operation of markets and the general or particular conditions of equilibrium which derived from these.

It is no accident that for Keynes the two main problems, and the two contradictions of the structural instability of capitalism, are (a) unemployment and (b) the distorted functional distribution of income:

"The outstanding faults of the economic society in which we live are its failure to provide for full employment and its arbitrary and inequitable distribution of wealth and incomes."<sup>4</sup>

<sup>&</sup>lt;sup>3</sup> It is interesting to note that, after the evidence of the present economic and financial crisis, many analysts recognised that the failure of the expectations mechanism, which was unable to prevent ultra-speculative behaviours by economic institutions, lies exactly in the non consideration of the s.c. "systemic risk", that is the macroeconomic level.

<sup>&</sup>lt;sup>4</sup> J.M.Keynes, *The General Theory of Employment, Interest and Money*, MacMillan, London, 1936, ch. 24, p.392 (henceforth, GT)

In Keynes's view these two problems were not due to whether market exchange was functioning more or less correctly, but rather to structural and institutional factors that were historically grounded and had been created by the technological and social evolution towards what we now call the Fordist model.

The "arbitrary and inequitable" distribution of income arises from the fact that in the new productive and technological conditions characterising Fordism the monetary wage is no longer the outcome of a joint exchange on the labour market<sup>5</sup> but is the outcome of a negotiation between social parties. In other words the monetary wage is no longer a variable dependent on the free market, but is transformed into an independent variable within a framework of contractual bargaining.

On the other hand the question of why there should be structural unemployment even in conditions of market equilibrium is explained by the fact that the variables which are the driving force of economic growth are the components of aggregate demand – first and foremost consumption and investment – rather than savings. These are variables which, not accidentally, can be defined only at the macroeconomic level and which – as in the case of the monetary wage – depend on elements that are independent of the market. In other words they derive from "psychological" factors which influence, in particular, the marginal propensity to consume and entrepreneurial expectations. For his part, Keynes offers an analytical "framework" which argues against

"the belief that the growth of capital depends upon the strength of the motive towards individual saving and that for a large proportion of this growth we are dependent on the savings of the rich out of their superfluity."<sup>6</sup>

This belief had previously translated into the pursuit of monetary policies involving high interest rates, a strong currency, and fiscal policies which reduced taxation on capital good and reduced inheritance taxes.<sup>7</sup>

<sup>&</sup>lt;sup>5</sup> This implies the creation of a wage of equilibrium which tends in the medium to long term towards an existence wage on the basis of demographic dynamics (supply of labour) and the modality of production (demand for labour). For a criticism and self-criticism of the neo-classical theory of the labour market, in addition to Keynes, see R. .Solow, "What is Labor Market Flexibility: What is it good for?", *Proceedings of the British Academy*, 1997, [Volume reference?]. For the analysis of the exchange of labour in the context of cognitive capitalism, see "Bioeconomics, labour flexibility and cognitive work: why not basic income?" in G. Standing (ed.), Promoting Income Security as a Right. Europe and North America, Anthem Press, London, 2005: pp. 337-50.

<sup>&</sup>lt;sup>6</sup> J.M. Keynes, GT, ch. 24, p. 393

<sup>&</sup>lt;sup>7</sup> Note that precisely these two policies are being pursued today, 70 years after the General Theory, within the European Union.

From this starting point Keynes was able to propose a series of alternative measures designed to stabilise the accumulation process of Fordist capitalism without needing to create major upheavals in its basic characteristics – i.e. private enterprise and the pursuit of monetary profit.

These measures were based on three guidelines:

- The first involves the establishment of a fiscal policy based on strongly progressive direct taxation. Keynes argues that the wealth of a nation depends on its productive capacity, and should aim at the maximum utilisation of productive inputs (in the first place that of labour). Such a target becomes possible if the collectivity's average marginal propensity to consume is increased, through a growth in lower incomes which is higher than that of the wealthier strata of society.

"But inasmuch as an increase in the habitual propensity to consume will in general (...) serve to increase at the same time the inducement to invest, the inference commonly drawn is the exact opposite of the truth." <sup>8</sup>

In parallel with this formulation, Keynes proposes the maintenance, if not the raising, of taxes on inheritance, and also discusses the role of savings in a macroeconomic context. He declares himself in favour of a drastic cut in interest rates, since he believes that high savings have a negative effect on accumulation. In the first place because (monetary) capital is not, by definition, scarce:

"The owner of capital can obtain interest because capital is scarce, just as the owner of land can obtain rent because land is scarce. But whilst there may be intrinsic reasons for the scarcity of land, there are no intrinsic reasons for the scarcity of capital."<sup>9</sup>

And secondly, because savings, understood as abstinence from consumption and as the source of investment, is a factor which impedes rather than encourages economic activity:

"Thus our argument leads towards the conclusion that in contemporary conditions the growth of wealth, so far from being dependent on the abstinence of the rich, as is commonly supposed, is more likely to be impeded by it."<sup>10</sup>

<sup>&</sup>lt;sup>8</sup> J.M. Keynes, GT, ch. 24, p. 393

<sup>&</sup>lt;sup>9</sup> J.M. Keynes, GT, ch. 24, p. 395

<sup>&</sup>lt;sup>10</sup> J.M. Keynes, GT, ch. 24, p. 393

That then leads to his famous observation about the "euthanasia of the rentier" in the context of Fordist material production.

"I see, therefore, the rentier aspect of capitalism as a transitional phase which will disappear when it has done its work. And with the disappearance of its rentier aspect much else in it besides will suffer a sea-change. It will be, moreover, a great advantage of the order of events which I am advocating, that the euthanasia of the rentier, of the functionless investor, will be nothing sudden, merely a gradual but prolonged continuance of what we have seen recently in Great Britain, and will need no revolution."<sup>11</sup>

The second guiding principle behind Keynes's proposals is the need to maintain a standard of living sufficiently high as to permit the fulfillment of the growing productive possibilities created by the technological and organizational transformations arising out of the introduction and diffusion of Taylorist technologies. In the 1920s and 1930s, particularly in the United States, the resulting growth in productivity laid the basis for a high rate of economic growth which on the one hand made it possible to avoid excessive increases in prices and on the other strengthened the dollar at the expense of the hegemony of Britain's sterling. The "Great Depression" of 1929, with its heavy social effects in terms of unemployment, had shown that it was the shortfall of demand that was the cause of economic recession. Therefore it was necessary to launch a policy of "high wages" to match the increases in productivity, so that the growing capacities for production might be matched by rising demand. Increasing wages, far from causing unemployment (as in the traditional neoclassical view of the labour market), enables the creation of more favourable entrepreneurial expectations, and encourages investment and therefore accumulation. This would be possible under a sober institutional regime which, through the adoption of appropriate short-term economic policies, encouraged a steady growth in aggregate demand and a regulation of wages which was neither too far below nor too high above the growth in productivity.

The role of public authorities and the state were thus essential both, in providing support for people on lower incomes (consumption, development of the welfare state) and in supporting accumulation (investments). It is in this perspective that Keynes argues for the third of his interventions, the socialisation of investment, through the adoption of a governmental industrial policy and a direct intervention by the state in investing in cases where private capital is not interested to invest. In Keynes's view the state also has a regulatory role in minimising the structural variability of the financial markets, often a cause of instability in

<sup>&</sup>lt;sup>11</sup> J.M. Keynes, GT, ch. 24, p. 397

investment activity, via appropriate interventions designed to regulate both the liberalisation of capital flows and speculative financial transactions.

Euthanasia of the rentier, policies of high wages, and socialisation of investment and control of the finance markets: these were the three pillars of Keynes's policies for correcting the structural distortions of the capitalist system in the era of Fordism.

As Keynes himself says, this is a political proposal conceived in reformism terms that are compatible with the requirements of private accumulation:

"In some other respects the foregoing theory is moderately conservative in its implications. For whilst it indicates the vital importance of establishing certain central controls in matters which are now left in the main to individual initiative, there are wide fields of activity which are unaffected. The state will have to exercise a guiding influence on the propensity to consume partly through its scheme of taxation, partly by fixing the rate of interest, and partly, perhaps, in other ways."<sup>12</sup>

Keynes himself never uses the term New Deal, which was used so successfully in the USA – from Roosevelt's initial campaign speech to the 1932 elections for the Democratic Party – to indicate this kind of economic pact between the more responsible social parties, with the state playing a mediating role. In fact, however, what Keynes proposes is a kind of tripartitie agreement designed to ensure a stable growth in demand via support for consumption by waged workers (the role of the trade unions) and support for accumulation (the role of the entrepreneurs), all under the aegis of discretional national economic policies (the role of the state).

### 3. The characteristics of the Fordist manufacturing system

The Fordist system of industrial production which operated with varying degrees of intensity in the industrialised countries of the OECD in the period post-World War II was based on three main elements:

1. the growth of productivity through the exploitation of static economies of scale or dimension;

2. the stability of the capital-labour relationship, through a regulation of wages which ties wage rises to increases in productivity, thereby guaranteeing a disciplined and ordered labour market;

<sup>&</sup>lt;sup>12</sup> J.M. Keynes, GT, ch. 24, p. 395

3. a lesser degree of internationalisation of production, dominated by national policies and the existence of a regime of fixed exchange rates founded on the stability of dollar-gold parity, as laid down in the Bretton Woods agreements, as a measure to minimise speculative activity in finance and currency markets.

Point 1 was a result of the introduction of Taylorism, in which the automation of production, combined with the introduction into the productive cycle of new materials and energy sources, made possible the standardisation of production and the development of growing outputs of productive factors. The fragmentation of labour on a Smithian basis, involving the expropriation of the knowledge of the skilled worker, which had been at the centre of production in the previous phase of capitalism and had provided the basis for the mechanisation of production, made possible a hierarchisation and disciplining of the organisation of labour unheard of until that point. This was accompanied by an increase in hourly productivity per employee which resulted in a reduction in costs and an increase of the possibilities and expectations of profit. The increase of productivity in Taylorism is accompanied by growing levels of output and a consequent growth in the size of factories and starts a vicious circle between increasing production, increases in the size of plant and the reduction of unit costs.

Point 2 defines the schema for the new wage regulation that goes under the name of Fordism. After the crisis of 1929 it becomes clear to observers, and to Keynes among them, that the transition from artisanal production to mass production requires a reformulation of the rules governing the redistribution of wealth to enable mass production to be accompanied by mass consumption. Secondly, Taylorism implies a very high degree of division of labour and automation of labour in order to exploit to a maximum the static economies of scale with the total subordination of workers to the demands and timings of factory machinery. The degree of alienation of labour thus reaches a peak, but this takes place in an organisational context where the worker inputs needed to be constant and available at every moment of the productive cycle. Tying the wage levels of subordinated labour to productivity thus becomes the most effective system for guaranteeing stability of employment and demand, within a productive context that is strongly rigid and disciplinary.

Finally, point 3 defines the national and international institutional framework that has the twofold aim of monitoring the stability of the accumulation process and mitigating and watching over both labour conflict and the conflictuality deriving from eventual international geopolitical shocks.

These three sets of factors are interdependent and each feeds into the other: the Taylorist conditions of production guarantee increasing rates of productivity, which in turn make possible an increase in the productive capacity, and satisfactory profits are achieved on the basis of positive expectations of demand thanks a growth of consumption, driven by rising wages. The adoption of international agreements and appropriate monetary and fiscal policies guarantees levels of company self-financing and investment activity which assures a degree of stability in the virtuous circle of Fordism, on the basis of high and stable average rates of growth.

The crisis of the Fordist manufacturing paradigm becomes structural once these three formal preconditions are no longer able to achieve their objectives.

In the first place a crisis of productivity ("productivity slowdown") begins to make itself felt when the average size of plants grows so large that economies of scale are no longer possible. At the same time the larger size of factories meant that transaction costs rise enormously, and they become increasingly independent of the volume of production. This dimishes the possibility of unit cost reductions and reduces expectations of profit. The situation is further aggravated by a decline in the rate of grwth of demand because of national market saturation, which penalises domestic demand, and because of the growing international instability resulting from the collapse of the Bretton-Woods agreements, the instability of foreign exchange markets and tensions in energy markets, three factors which combine to reduce overseas demand and international flows of trade.

The regulation of wages also went off the rails in terms of the compatibility required between wages rises and productivity. The wages demands of the late 1960s and the insubordination of the mass worker over working hours, conditions of work and worker alienation shattered the precarious redistributive equilibrium of Fordism.

It thus became necessary to initiate a restructuring process capable of overcoming the rigidities imposed by the Taylorist and Fordist organisation of production, a rigidity which was first and foremost technological, and thus located within production, since the standardisation of production had limited the possibilities for a differentiation of consumer goods, and ultimately of labour.

At thirty years distance from the crisis of the 1970s we are today in a position to grasp the new paradigm which is spreading in the countries of advanced industrialisation – the paradigm of cognitive capitalism<sup>13</sup>.

<sup>&</sup>lt;sup>13</sup> For a basic reference texts see C.Vercellone (ed.), *Capitalismo cognitivo*, Manifestolibri, Roma, 2006, A. Fumagalli, *Bioeconomia e Capitalismo cognitivo*, Carocci, Roma, 2008, Y. Moulier Boutang, *Capitalism cognitif*, Ed. Amsterdam, Paris, 2007. In English, see A.Fumagalli, C.Vercellone (eds.), "Le capitalism cognitif. Apport et prospéctives" special issue of the *European Journal of Economic and Social Systems*, Volume  $20 - n^{\circ} 1/2007$ 

### 4. Cognitive capitalism ("bioeconomics")<sup>14</sup>

The paradigm of cognitive capitalism introduces new historical features, as the outcome of a process of technological change and transformation of production which has had a determining influence on the conditions of labour and on the regulation of wages that provides the basis for the distribution of income.

We define the transition to this new era as the period of post-Fordism. In this period the organisation of production and technology takes a multiplicity of forms, which enjoy a greater or lesser success depending on their geo-economic environment and the depth of the crisis of the Fordist industrial paradigm in their locality.

The salient features of cognitive capitalism are the following:

- The production of wealth is no longer based solely on material production but is increasingly based on immaterial elements, in other words on inputs (raw materials) that are intangible and difficult to measure and quantify, deriving directly from the application of relational, affective and cerebral faculties of human beings.

- The production of wealth is no longer based on homogeneous and standardised formats of the organisation of the labour process without regard to the types of good produced. Production in cognitive capitalism takes place in a variety of different through a wide variety of labour-process models made possible by the development of new technologies of linguistic communication and transportation, and particularly characterised by forms of networking. One consequence of this restructuring of labour processes is that the traditional unilateral hierarchical form of the factory gradually comes to be replaced by hierarchical structures that are organized territorially via chains of production involving sub-contracting suppliers and characterised by relations of cooperation and/or command;

- The way in which work is done alters both quantitatively and qualitatively. In terms of the material conditions of labour (the quantitative aspect) there is a marked increase in working hours. Often there is also a piling-on of additional tasks, a tendency for the separation between work-time and life-time to disappear, and a greater individualisation of work relations. Moreover the nature of work itself increasingly comes to involve elements of immateriality: relational activities, communicational activities and brain activity becomes increasingly present and important. These activities require training, skills and attention: the separation between mind and brawn typical of Taylorised work becomes less marked and what we have instead is the development of sets of production routines and

<sup>&</sup>lt;sup>14</sup> For a deep analysis of the concept of "bioeconomics", see A. Fumagalli, *Bioeconomia e Capitalismo cognitivo*, Carocci, Roma, 2008

intense active interventions in the productive cycle. To the traditional division of labour by tasks is added the division of knowledge and competences, increasing the degree of subjection of the worker to the timings of the production process. This subjection is no longer imposed in disciplinary fashion by direct command; most of the time command is introjected and developed through forms of conditioning and social control. This results in contractual individualism becoming the juridical institutional framework, and within this competition and emulation tend to become the model of working behavior.

- The role of knowledge becomes fundamental. To the creation of value through material production is added the creation of value through the production of knowledge. In both cases the labour factor is decisive and its subordination to capital provides, via exploitation, the preconditions for the realisation of profit.

The point that we want to stress is this: when we say cognitive capitalism we mean the production of wealth through knowledge itself, through the use of those faculties of labour that are defined by cognitive activity (cognitive labour), i.e. the employment in large part of immaterial cerebral and relational activities.

Since the brain (as the organ involved in the accumulation of knowledge) is by definition individual – indeed is an element of the very definition of the individual through the faculties of language and memory – cognitive labour is by its nature difficult to homogenise, since is bioeconomic, in other words dependent on the biology of the individual person. Precisely because of its individual nature, cognitive labour demands a high degree of relational activity, as the instrument for the transmission and decodification of its own brain activity and accumulated knowledges: cognitive abilities and relational activities are two faces of the same coin and can be regarded as indivisble. They are the basis of General Intellect, in other words the form of diffuse intellectuality which Marx discusses in the Grundrisse<sup>15</sup>. General Intellect is the principal new source of (surplus) value, and for it to become productive it needs "space" in order to develop networks of relations; otherwise, if it remains embodied in the individual person, it becomes an end in itself; it may be a process of individual valorisation, but it is not not exchange-value for the accumulation of wealth, i.e "commodity". Cognitive capitalism is necessarily a networked reality. In other words it is not linear, and the hierarchies which it develops are internal to the individual nodes, and between the various nodes, of the network. These are complex hierarchies and often tied to factors of social control of the inner space within which it develops.

The transition from the production of money through commodities: (M-C-M') to the production of money through the knowledge commodity [C(k)]

<sup>&</sup>lt;sup>15</sup> Cfr. K.Marx, *Grundrisse*, trans. Martin Nicolaus, Penguin Books, Harmondsworth, pp. 706-7

: [M-C(k)-M'] has thus altered (a) the mode of production and (b) the regulation of wages.

As regards the mode of production, there is a growing process of tertiarisation in the countries of old industrialisation; there is also an outsourcing (delocalisation) of manufacturing to the countries of recent industrialisation, thanks to the development of globalised networks of sub-contracting suppliers made possible by the development of Information Communication Technology (Ict) and new transportation technologies. The new computer technologies make possible the exploitation of new and dynamic economies of scale, namely learning economies and network economies, arising out of the spread of knowledge and cumulativity in the exchange of knowledge itself<sup>16</sup>. The learning economies and network economies develop over time and make possible a growth in the productivity of General Intellect, a productivity which cannot be ascribed to individual behaviours but is rather the fruit of social cooperation, i.e. social productivity. It is this social cooperation which gives the possibility of scaling up production, as happened in an earlier context with the automation of production under Taylorism.

As to how wages are regulated in this coming period, the tendency is towards an individualisation of the labour relationship, with contracts arrived at by individual negotiation rather than by collective bargaining. This is partly the outcome of qualitative changes in the actual nature of work, but it is also based on the fact that cognitive-relational activities which are by definition individual. This individualisation of the labour relationship tends to go hand in hand with a high degree of spatial and functional mobility, reducing stability of employment and thus engendering a high turn-over of labour. The flexibility that derives from this affects all aspects of people's working lives without exception, ranging from the kinds of job-contracts in force (where there has been an explosion of non-typical forms, of parasubordination and other-directed and second-generation self-employment) to the structures of wages and working hours. There are two important outcomes of all this: on the one hand we have a cooptation of life as a whole into the working process; this means that all the more or less cognitive human faculties are activated in the working process, and also that life itself is totally subsumed in the labour process. On the other hand, precarity becomes a structural condition; it goes well beyond being merely a condition of working life, to the point of becoming almost existential. The centrality of the condition of precarity in cognitive capitalism is paradigmatic: it is a homogeneous condition of labour which unites a large part of the workforce, above all young workers and intellectualised labour, and at the same time comes to be lived subjectively in differenti-

<sup>&</sup>lt;sup>16</sup> By cumulativity of the exchange of knowledge we mean the fact that the knowledge commodity is not rival, and thus is not scarce, in the sense that the more it is exchanged the more it becomes diffused and becomes abundant.

ated and individualised ways. The result is a high degree of subordination and blackmailability of the worker as regards company compatibilities, and this leads to a breaking of the link between productivity and remuneration which was typical of the Fordist regulation of wages. Labour activity is generalised. It expands over the whole span of human life, thereby widening the borders of exploitation, which are no longer measurable in terms of the individual working day. At the same time it sees the growing participation of subjects who, during the period of Fordist manufacturing, had been marginal (such as migrant labour-power) or employed in activities of reproduction (female labour power). To the traditional division of labour by tasks and functions there is now added a new and growing division of cognitive-type labour, which, through the individualisation of labour relations and the differentiated use of cognitive-relational faculties, leads to further processes of fragmentation and diversification of labour-power.

The new characteristics of tendentially immaterial productive activity – founded on the exploitation of learning economies and network economies, and the central role of precarity and subalternity which prevents a new form of wages regulation – open up new contradictions.

The first contradiction concerns the productivity of General Intellect as the source of the creation of value in cognitive capitalism. This productivity depends on two factors which are inversely correlated. On the one hand there is capital's drive to extend intellectual property rights in order to be able to appropriate knowledge and R&D outcomes via licensing and copyrighting. The effect of this is to limit the diffusion of knowledge, rendering it artificially scarce. On the other there is capital's need to create a "virtuous circle" of the circulation of knowledges and information and to increase their diffusion in order to accelerate the generation of new innovations and knowledges and the codification of hidden knowledges. The implicit incompatibility between intellectual property rights and the diffusion of General Intellect thus implies a trade-off which is currently unresolvable at the level of simple market exchange.

A second contradiction has to do with the nature of work itself. Capital is caught between the necessity of social and relational cooperation (in order to maximise advantages from learning and networking economies) on the one hand, and the privatisation of knowledge and the control of individual worker output on the other. Viewed in terms of the organisation of the labour process, this contradiction translates into (a) the need for social cooperation in production, and (b) at the same time the creation of hierarchical relationships made possible by the individualisation of the labour relationship and the blackmailability of workers in conditions of precarity. Cooperation and hierarchy can thus be seen as the two pivotal elements regulating, in a conflicting and unstable way, the labour process in cognitive capitalism. A third element of contradiction is that deriving from the fact that there is no longer a clear division between work-time and life-time. More than a contradiction in a real sense, what we have here is a process of assimilation between work and life which generates a potential contradiction in working subjectivity itself, creating processes of idiosyncrasy and instability in the organisation of individual existences. It relates back to the dualism between machine and man, given that in cognitive capitalism the machinic productive tool tends increasingly to be people's brains, in other words a non-alienable part of their persona and internal to labour power itself. The concrete labour that generates use value, and for that reason is in itself potentially "creative", becomes increasingly intermixed with the abstract labour determined by the capitalist conditions of production, generating an enorion\* of possible liberation and autonomy of thought for labour, on the one hand, and the necessity of repression and brain lobotomy for the enterprise, on the other.

The existence of these contradictions generates structural instability. In a context in which:

- intellectual property as a new form of ownership of the immaterial means of production (which replaces the ownership tradition of material means of production) is protected and incentivised at the expense of the possibilities of growth of the social productivity of general intellect;

- the condition of precarity and uncertainty of income (i.e. intermittent employment and low wages) makes it difficult to take advantage of the learning and networking economies; the dynamics of production in cognitive capitalism risk running into structural crises, aggravated by structural deficiencies of demand in the absence of a policy for the redistribution of income.

Up until now the process of financialisation and concentration of production and technology, together with the accompanying "delocalisation" and outsourcing of production, have made it possible to achieve low production costs, high profits for the financial institutions, and forms of indebtedness that have sustained both supply and demand at the global level. The state of permanent war (the "military coup of Empire") has so far held off the risk of this structural instability becoming critical. But it was clear that this situation could not go on for a long. As soon as the speculative bubble on sub-prime financial activity busted in August 2007, the situation of private indebtedness, favored by the dismantling of welfare state and no more compensated by positive capital gains, became unbearable and the above mentioned contradictions appeared in all their unsustainability.

The present situation of crisis is no more than the results of these contradictions<sup>17</sup>.

<sup>&</sup>lt;sup>17</sup> For a deep analysis of the global and economic crisis, see A.Fumagalli, S.Mezzadra (eds), *La crisi dell'economia globale*, Ombre Corte, Verona, 2009.

In order to reduce the current instability of cognitive capitalism it would be necessary – at least from a merely theoretical point of view – to rethink the definition of the redistributive variables to bring them more into line with the nature of value creation and accumulation in present-day cognitive capitalism.

Looking first at the overall labour process, we can say that in cognitive capitalism the remuneration of labour translates into a remuneration of life. In other words, whereas under Fordism remuneration was in the form of the wage, today in cognitive capitalism remuneration has to be in the form of an income of existence (basic income) and the struggle that is about to begin is no longer the fight for high wages (to put it in Keynesian terms) but rather the fight for a continuity of income regardless of whether or not one actually has a job. As we have already seen, following on the crisis of the Fordist-Taylorist paradigm work time and life time are no longer easily separable. The most exploited subjects in the world of labour are those whose entire life is set to labour. This happens particularly in the services sector, and shows itself in the lengthening of working hours, especially for migrant workers: a large part of the labour time involved in the activities of the tertiary sector does not happen in the workplace. The wage is the remuneration of labour; individual income on the other hand is the sum of all the incomes which derive from living and from relations in a territory (job, family, welfare, eventual unearned incomes, etc) - and this is what determines the standard of living. As long as there is a separation between work and life, there is also a conceptual separation between wage and individual income, but when the entirety of life-time is set to work the difference between income and the wage vanishes

However this tendency towards a growing overlap between work and life, and thus between wage and income, is still not taken into account in institutional regulation (and is also not recognised by some on the Left). Basic income can represent an element of institutional regulation adapted to the new tendencies of capitalism as we know it. It is defined by two elements: the first strictly wage-related, on the base of life performances which immediately translate into working performances (certified and paid labour time, but also the life-time taken up in education, relational activity and reproductive activity); the second is a component of income (in addition to the first) which represents the amount of social wealth which is due to each individual. This social wealth is the outcome of the cooperation and social productivity which are exercised in a given territory (which today is the terrain of profits and real estate and property rents). When we define things in this way, the concepts of wage and income appear complementary.

Turning now to the sphere of production, a second innovative aspect is the role played by intellectual property rights. As we have already observed, these

are the main instrument allowing capital to take control of general intellect. Since knowledge is a common good, produced by social cooperation, the surplus value which derives from its use in terms of innovative activity and growth in the labour productivity are not simply the fruit of an investment of a stock of physical and individual capital (which could be ascribed to a single given capitalist or entrepreneurial organisation) but depends rather on the use of a social patrimony ("human social capital ", as the economists would say) which has been sedimented in the territory and which is independent from the initiative of any individual entrepreneur. The level of profit which derives from it is thus not a simple relationship between the level of investment and the stock of capital which defines the value of the enterprise, but rather a "something" whose entity also depends on existing "social" capital. In other words, since profit is created out of the exploitation and expropriation for private gain of the common good which is knowledge, it could in part be taken as similar to an income: an income from territory and learning, or an income that comes from the exercise of intellectual property rights, from the ownership of knowledge.

.Now, paraphrasing Keynes one could say that,

"The owner of knowledge can obtain profit because knowledge is scarce, just as the owner of land can obtain rent because land is scarce. But whilst to there may be intrinsic reasons for the scarcity of land, to there to are not intrinsic reasons for the scarcity of knowledge."<sup>18</sup>

The intermixing between profit and income derives from the fact that in cognitive capitalism the accumulation process has extended the basis of accumulation, coopting within it activities of human doing which in Fordist industrial capitalism were not productive of surplus value, and neither did they translate into abstract labour. New inputs have been added, or strengthened, and they have become strategic – like, precisely, knowledge as a commodity unto itself (and which cannot simply be incorporated into machines), and space, both in its physical-territorial terms, and in its virtual terms. It follows from this that the ownership of these factors no longer gives access to income but, since they are put into production, they give access to actual profit. This is particularly true for territorial ownership and ownership of the flows of communication, and also for the management of monetary and financial flows.

<sup>&</sup>lt;sup>18</sup> Here we have taken the Keynes quotation, as cited above (J.M. Keynes, GT, ch. 24, p. 396) and we have replaced the word "capital" with the word "knowledge", and the word "interest" with the word "profit".

From this point of view we would like to propose that the kinds of economic policies proposed in Keynes's time, shortly after the rise of Fordism, might be rewritten to take into account the new features arising out of the transition to cognitive capitalism.

We could see basic income as equivalent to Fordism's (relative) high-wage policies, and Keynes's "euthanasia of the rentier" could be read as the euthanasia of intellectual property rights, accompanied by fiscal policies to re-design the tax base, taking into account the new productive inputs, most notably space, knowledge and financial flows.

With regard to Keynes's third proposal, for a socialisation of investment, cognitive capitalism is characterized by a socialisation of production in the face of an increasingly massive concentration of technological and financial flows, which today are the levers which permit control and command over the flexibilised and externalised productive activity. Any policy which tends to affect this concentration, which is the concrete basis of investment flows, thus directly affects the structure of ownership and undermines at root the capitalist relation of production.

The possible "reformist" proposals which might define a social contract in cognitive capitalism are therefore restricted to the introduction of a new wage regulation based on basic income, and reducing the weight of intellectual property rights, which could tendentially lead to a kind of euthanasia of income/profit deriving from intellectual property.

However, in the present state of things, there are neither the economic nor the political preconditions for such a social contract to come about. It is therefore mere illusion.

The Fordist New Deal was the outcome of an institutional intervention based on the existence of three preconditions:

- the existence of a nation-state in a position to develop national economic policies independently, albeit coordinated with other states;

- the possibility of measuring increases in productivity and therefore to oversee their redistribution between profits and wages;

– industrial relations operating between social partners who recognised each other reciprocally and which were legitimated at an institutional level, expressing themselves in a single-voiced representation of the class interests of both employers and workers.

None of these three preconditions is present in cognitive capitalism today.

The existence of the nation-state is going into crisis as a result of the processes of internationalisation of production and financial globalisation which today, in its declinations in terms of technological control and knowledges, of information and apparatuses of war, represent the bases for the definition of a supranational imperial power.

In cognitive capitalism, at a push it is possible to imagine a supranational geographical spatial entity. From this point of view the European Union could function as a public socio-economic space in which a New Deal might be implemented. But in the present state of things the construction of Europe is proceeding along monetarist and neo-liberal lines which are the negation of the possibility of creating an autonomous and independent public and social space free from conditioning by the dynamics of the finance market.

The dynamics of productivity tend increasingly to depend on immaterial productions and on the involvement of cognitive human faculties. These are hard to measure with the traditional quantitative criteria used in Fordism. The present difficulty in measuring social productivity does not permit a regulation of wages based on linking wages to productivity<sup>19</sup>.

The proposal for a basic income could be the solution. Although it is seen, not surprisingly, as unacceptable by the employing class, it also encounters difficulties among trade-unionists. The employers see it as a subversive measure, insofar as it would reduce the blackmail involved in people's need for a job. For the trade unions, it contradicts the work ethic on which a part of the trade union movement still bases its existence.

Last but not least is the key question of the crisis in the forms of social representation among both the employing class and the trade unions. The growing failure of a single organisational model is leading to a fragmentation not only in organised labour but also among the employers. The employers are segmented between the interests of small companies (often locked into hierarchical subcontracting relationships), the interests of the big multinationals and speculative activities on the financial and monetary markets, appropriations of profits and income from monopoly in the fields of distribution, transportation, energy, military supplies and research and development. In particular, the contradiction between industrial capital, commercial capital and financial capital in terms of different strategies and time horizons, and that between national capital and supranational capital in term of geo-economica and geo-political influence makes it de facto impossible to achieve a level of homogeneity of attempts of the capitalist class, and the definition of shared objectives. We would say that it is the present intermixing between profit and income that renders the capitalist class not homogenous. The element which most unites the interests of capital is the pursuit of short term profit (which has its origin in various ways), which renders practically impossible the political formulation of the kind of progressive reforms which were instituted in the time of Fordist capitalism.

<sup>&</sup>lt;sup>19</sup> This is not to say that this difficulty will not find a solution at some point in the future.

Furthermore, the world of labour also appears increasingly fragmented, not only from a juridical point of view but above all from a qualitative point of view. The figure of the wage-earning industrial worker may be newly-emergent in many parts of the world but it is in more or loess terminal decline in western countries. Instead what we have is a variegated multitude of atypical and precarious figures, including the employed, the employed in the sub-contracted sector\* and the selfemployed, whose ability to organise and represent themselves is becoming increasingly restricted thanks to the prevalence of individual work-contracts and an inability to construct anything approaching the structures of Fordist trade unionism.

The overall result is that in cognitive capitalism there is no space for an institutional reform policy capable of reducing the structural instability that characterizes it. No New Deal is possible. And this is the case despite the appearance of measures designed to favouring a re-equilibration of the accumulation process. But such measures, which we have defined as (a) a wage regulation constructed on basic income and (b) a productive capacity founded on the free and productive circulation of knowledges, undermines at root the very nature of the capitalist system, i.e. the necessity of work and the blackmailability of income as an instrument of domination of one class over another, as well as violating the principle of private ownership of the means of production (yesterday machines, today knowledge).

In other words, we can conclude that in cognitive capitalism a Keynesiantype social compromise, adapted to the characteristics of the new processes of accumulation, may be possible in theory, but it is impracticable from a political point of view.

In fact, a policy which is to all intents and purposes reformist (i.e. seeks to find a form of mediation between capital and labour satisfactory to both parties) and which is capable of guaranteeing a structural stability of the paradigm of cognitive capitalism is impossible. The idea of a social compromise founded on basic income and the free diffusion of knowledge radically undermines the foundations o f the capitalist economic system: the obligation to work for a living (and thus the subaltern nature of labour) and private property as the source of accumulation.

The relationship between reformist praxis and revolutionary praxis thus tends to redefine itself on new bases, and to show that a reformist project at the level of the redistribution of wealth does not affect, at least in the immediate term, the capital-labour relationship of exploitation, but it assumes possible revolutionary and subversive connotations that lead to the overcoming of the capitalist system itself.

It follows from this that, since it is practice which guides theory, only conflict and the ability to create *multitudinarian* movements can – as ever – make possible the social progress of humanity towards a post-capitalist society.