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Industrial and post-industrial model of economy: the (work and income) redistribution model within the two models

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[Abstract]

The transformation within the second half of the last century of the industrial economy into a "service" or "post industrial" economy, has been subject to huge quantities of studies, evaluations and discussions. Attention has also been focussed on the implications of the aforementioned transformation on the evolution of the economic theory.

Using, as a starting point of the author's previous works throughout which he has participated in the analysis of ongoing structural changes[1], and to the analysis of their effects, either practical or theoretical, the present paper intended to focus only a specific further aspect of that transformation: that of the (work and income) distributive process in the two models of economy.

Founding the analysis on the profound differences (which assume in abstract also some antagonistic characters) between the industrial economy and the post industrial economy, in terms of 1) consumption structure; 2) production activities structure; 3) structure and behaviour in the labour market; and 4) increasing dichotomy between high level productivity activities and low level productivity activities, the paper analyses the weight, the role and the inter-relationship between the two areas. In particular, it highlights the differences in the distributive process within the two models of economy, and how the relative proportion in the two productive areas, characterises the two models in such a way as to provide two totally different typologies of effect.

Furthermore the paper develops some arguments regarding the specific role of the relative prices system and of inflationary pressures in the two models of economy (industrial and post-industrial).

And finally the paper concludes with some general considerations of the implication that the behavioural analysis of the two models of economy can have on current theories of capital, and generally on the traditional foundations of the economic analysis.

[1] In particular a recent work entitled: *The Associative Economy: Insights beyond the Welfare State and into Post-capitalism* (Macmillan, London 2000).See also a paper on: *The Non –market Activities and the Future of Capitalism* (presented to the Eight Basic Income Congress (Berlin 2000).

Industrial and post-industrial model of economy:
the (work and income) re-distribution model within the two models

The evolution of the "economic system" from "industrial" to "post-industrial" is one of the many ways through which the structural changes of the contemporary economy have been explored, and eventually, summarised. For many years, I have also shared in this exploration, and I have also accumulated some elements of evaluation, collected and illustrated, in a certain order, in a recent book.[2] Personally, I wanted to focus my contribution in the above recalled exploration on two points: 1.) the influence that the transformation of industrial systems into post-industrial systems would have on the foundations (postulates and paradigms) of economic thinking , and consequently on the validity of "economic theory" itself[3]; 2.) the influence, which should better be called the interaction, of such transformation on the growth of those sectors of economic life (consumption, production, and exchange) which have been called more and more often today a private, *non-profit sector* (or *third sector*).

The identification of "ideal-type" requisites of the two systems: industrial and post-industrial, on which I have spent a good deal of my reflections in the work cited above on the Associative Economy, has induced me to also outline the different behaviours of the two

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[2] *The Associative Economy: Insights Beyond the Welfare State and into Post-Capitalism*, MacMillan, London, 2000. This book represents an organic re-elaboration of numerous writings produced across at least three decades.

[3] On the first point, general thinking has been less abundant than reliable, in spite of the historical presence among economists of a school of thought – called institutionalist or evolutionist – oriented toward denying the possibility of universal economic theorizing, not strictly inter-connected to concrete structures (or "systems") historically determined. However they didn't lack large acquisitions in this sense; among the most organic and recent I would like to note those of Andre Gorz (1989) and Fred Block (1990).

systems with respect to the problems that are conventionally defined – in traditional political economy – as *distributive*.[4] However, the distribution problems analysed are not those concerned with the distribution between "production factors" (which have occupied a huge part of the history of political economy, and seem to still prevail in today's debate among economists), but rather, those concerned with "production sectors", and more precisely, between *high-productivity-level* sectors and *low-productivity-level* sectors – or more simply, between "productivistic" and "non-productivistic" sectors - ; a dichotomy which is more and more emergent in the post-industrial economy with respect to the industrial economy.[5] These distributional problems, in my opinion, strongly characterize the structural differences between the two systems and deserve much attention. It is well-known that they are inter-connected with the most apparent phenomena which are the object of theoretical and political debate: like, for example, relative prices, price stability, inflation, profitability, incomes, and so on, and economic policies which are derived by them. However, one looks at this problem, very often, through the lenses (paradigms) of an industrial society, and not those totally different lenses of a post-industrial society.

In this paper I would like:

a. to illustrate and discuss in what sense the two lenses are different, i.e. why the conceptual instruments diverge between the two models of society (which, besides, had its origins in the evolution from one system to another; and this is not tautological or self-referential, but is simply "dialectical")
b. (donning the proper lens) discuss the different distributional implications of the post-industrial model, especially in respect to income diffusion, employment and unemployment, inflation, and so on.

[4] Chapter eight of the book cited above has been dedicated to this subject.

[5] The dichotomy (and definitional aspects connected to it) between high-productivity-level and low-(or null)-productivity level sectors is dealt with in chapter five in the book in question, which is dedicated to the change in production structures.

1.The redistribution of labour and income

1.1 In the industrial society model

In industrial society, labour is distributed according to the demand which is born from productive activities, which in turn depend on the market demand.

But the market demand which is formed in industrial society is subject to criteria and constraints which technological progress and the search - by means of it - for an ever greater productivity and profitability impose. A permanent need for the adaptation of the supply to the demand for labour and for the conversion of obsolete qualifications into new ones is created. A regime of permanent dislocation is thus produced of the work force which must flexibly, constantly, readapt itself to technological changes.

This process of continuous dislocation is determined in particular in the “productivistic” sectors of industrial society (which, as said, do not include only industries but also many of the service sectors[6]).

In industrial society, the expansion of consumption (which the reduction of real unit production costs permits) leads to an expansion of the demand for income and well-being, and facilitates the creation of new jobs in the low prodyctivity (or 'non-productivistic') sectors, in the first place the public ones.[7]

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[6] In the overcoming of the “tertiary activities” concept (traditionally related to a statistical industry classification) a new definitional criterion of it intervenes (which dates back to Fourastie (1949, 1952) based on the rate of increment – low or null – of productivity. A previous work of mine (Archibugi, 1977) has already summarized the entire question. Consequently, a good deal of “services” if susceptible of increments of output per input thanks to new technologies, are to be aggregated to the concept of “industry”, and to the “productivistic” sector.

[7] We are observing a process almost the inverse of that which registered historically with the passage from the pre-industrial society to the industrial society (it comes mind on this to passage the beautiful fresco by Karl Polanyi (1944) of the “*Great Transformation*” as a process of marketization). Today a passage is occurring from industrial to post-industrial society as a result of extending the non-market area, thus a kind of “de-marketization”.

1.2 In the post-industrial society model

The service society, as said, arises when this process reaches a point beyond which a sort of feed-back is produced, in as far as expansion finds its limits in the global productivity of the system. This is because the high productivity (or productivistic) sectors have reached a *minimum proportional threshold* in the entire productive system. The transfer of income from these sectors to the non-productivistic sectors is no longer successful either through the 'market' or through public finance. An *explicit process of public decision making* has to intervene (from the 'invisible hand' to the 'visible hand').

We would like here to examine more deeply some of the characteristics of the redistribution process and transfer in the evolution of industrial society, and the modification of this process in the model of the post-industrial or service society. We will analyse in particular its effects on inflation and unemployment.

2. The relative weight of the two model, productivistic and non-productivistic

2.1 A Misunderstanding about the usefulness of "non-productivistic" sectors

First of all however, it will be opportune to dissipate a semantic misunderstanding.[8]

The fact that, in the development of industrial society, both income and labour are the object of redistribution and transfer from 'productivistic' sectors to 'non-productivistic' sectors, has led often to

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[8] Truly, this remark should not be necessary. But the damage which vulgar concepts produce even in cultivated persons makes this clarification useful.

the belief that the non-productivistic are economically dependent (and in some ways parasitic) on the productivistic ones.

This produces a distorted vision of reality. In fact the expansion of the non-productivistic sectors is permitted by the increases in the productivity of the productivistic sectors (at least until the productive object of the latter responds to the preferential needs of the people); but also the increases in productivity in the productivistic sectors are 'allowed' - under certain conditions - by an expansion in non-productivistic sectors (if this corresponds likewise to the preferential needs of the people and if its implemented in a favourable industrial environment). This happens in two ways, one direct and one indirect.

In the direct way the increase in productivity of the sectors which are susceptible to it, is to a large extent an effect of technological innovation or progress: which nearly always is the result of organizational, cultural and scientific progress. There is no point in mentioning how the latter is in turn a function of activities which do not only produce material goods, but also services: research, scholastic education, recreation and so on. Furthermore, it is useless to say how much the productive activity, in its technical innovation, benefits - as external economies - environmental protection, social and public security, administrative organization, design, marketing, etc., i.e. an (essentially 'urban') social 'infrastructuring', which therefore always presents itself as the cause and also the effect of not directly productive activities. Even the commercial and distribution services are normally considered a factor for the increase of productivity (and not only of profitability) of manufacturing industries.

In an indirect way, the increase in productivity in sectors susceptible to it (the sector which we have called 'productivistic') is allowed by the expansion of the actual market, of the purchasing capacity of the consumers, as said. And if it is not possible to obtain this expansion only with the expansion of income and the number of industrial workers and operators, it can be guaranteed by the expansion of income and the number of non-industrial workers (i.e. of the non-productivistic sectors).

The undoubted fact that it is the increase in productivity of the productivistic sectors which allows any 'redistribution' of income and employment, must not lead us to ignore or forget the close connection and interaction between productive sectors ('productivistic', or high-productivity rate sectors, or 'non-productivistic', or low-productivity rate sectors) in the promotion of the progress of productivity itself.[9]

In sum, those sectors which, from the point of view of national accounting, we can call “productivistic” with respect to those that are “non-productivistic”, are “productive” of both output and of welfare, independent of the level or rate of technical productivity they can achieve. And maybe, the “non-productivist” sectors, given the more intense and growing demand in today’s society for goods and services from such sectors, could be defined even more “productive” than the “productivistic” sectors.

That notwithstanding, we shouldn’t underestimate the effects which derive from a separated evaluation in economic analysis from the dichotomy between the two sector groups,[10] and which arrives at a comprehensive and joint vision of the problems of the development and distribution of the benefits of growth.

2.2 The weight of the two sectors and differential characteristics of the distributive process in the two models

What has been described above is valid likewise in industrial society and that of services.

The difference between the two models lies however in the implications which may arise from the relative weight which the two

[9]For wider knowledge of the income distribution theory, a milestone in the history of economic thinking, I will sugget the reader to refer to a old 'readings' edited by Fellner & Haley (1950); and close to the subject of this chapters set of papers by Sylos Labini (1974).

[10] Which has been developed, as said, in chapter five of the cited book on the Associative Economy.

groups of sectors (productivistic and non-productivistic) have in one or the other model; and from the proportions of the process of redistribution which may derive from this different weight. It is on these points that we believe that it is opportune to dwell for a little while longer.

In fact my thesis is that, in the service society, the weight of non-productivistic sectors increases enormously (i.e. it exceeds a certain threshold which - we have said - brings about the new model). And the consequence is that the transfer of income and labour becomes gigantic: it exceeds nevertheless a certain size threshold. (It would perhaps be opportune, and perhaps our duty, to say something more about this threshold, but reflection on this point is still premature).

Some axioms could be established:

a) the more productivity increases in the productivistic sectors, the more the weight of the non-productivistic sectors increases (and vice-versa);
b) the more the productivity of the first increases and the weight of the second increases, the more the need to transfer income and labour from the first to the second is extended.

It is therefore the *proportion of the transfer* which characterizes the service society from the industrial one, and not the existence of the transfer itself. But, as said, before characterizing further this direct comparison between the two models of society, it is perhaps opportune to re-propose and interpretation of the re-distributive processes in industrial society useful for the comprehension of our thesis.

3. The differential characteristics of the re-distributive process in the two model of society

3.1 The characteristics of the re-distributive process in the evolution of the industrial society model

It is known that industrial society was born because, by means of an intense process of income and labour transfer, it managed to gain for all of society - in a more or less proportional way - advantages deriving from the substantial increases in productivity in industry.

The model of behaviour is known: we will reiterate it here in purposely simplified terms.

First the advantages of industrial productivity spread through the reduction of unitary prices (to the user or consumer) of industrial products[11]. It is the “market” which “redistributes” or transfers the additional real income (from improved productivity). (For indivisible public services it is the state - as always - which redistributes or transfers by means of tax collection).

Subsequently, the reduction of unitary prices of products of the productivistic sectors (which is the “natural” re-distributive factor, as said) only occurs in “real” terms, i.e. through inflation, and change in the monetary parameter. In fact the rigidity of the supply prices of the productivistic sectors due to a set of institutional factors (imperfect or oligopolistic competition, “administrated” prices, “price umbrellas” in favour of marginal firms, etc.) brings about an increase in the prices of the non-productivistic sectors, as much as it serves to keep enough balanced the relative price system, or - in other words - to rebalance the capacity for purchase of primary incomes (labour and capital) of the two sectors, to the new levels of real productivity.

This causes a general increase of prices (price inflation) which will be at as high a rate as is required to restore that real equilibrium, at the new levels of real productivity.

Therefore it can be said that the *redistribution* - essential in social equilibrium (at 'zero sum', a guarantee of not only economic, but in particular social and political stability) and very useful also for the possibilities of further growth (in productivity) - *in these circum-*

[11]Naturally here we are taking for granted that this will happen through a balanced relationship of input and output between the various sectors, from primary goods to intermediate production until the final consumer. The possible disequilibria in the repercussion of productivity effects on prices in all the various passages in play, are for the moment excluded from the analysis and hypothesis.

stances (institutional rigidity in prices, on which there is large evaluative consensus) *is guaranteed by inflation*. However it is guaranteed by an inflation which is contained within certain rates which are 'equal' to those of the increase of the 'average' productivity of the economic system (as is commonly claimed); which is in reality the increase in physical productivity in the single productivistic sectors.

The task of the public "economic policy", in these cases - as is upheld and theorized widely - is that of managing (by means of the use of instruments available to the government) to make sure that, in the absence of the possibility of containing nominal prices, at least their dynamics are contained in the limits of the process activated by the need to rebalance the real income in comparison to gains in productivity.

3.2 The role of inflation in the re-distributive process in the industrial society model

It is not true, in fact, that if nominal incomes increase on average within the limits of the average physical productivity of the system, inflation is not produced: because such an assumption does not bear in mind the re-distributive "factor" (which we have simplified) between productivistic and non-productivistic sectors. In order that inflation is not produced in those circumstances, it is necessary that the nominal prices of the productivistic sectors are reduced (in proportion to increase in the physical productivity of the same). If this does not happen, the need for redistribution implies an increase in prices (and relative primary incomes, or vice-versa) of the non-productivistic sectors, and therefore a modification towards the increase of the "prices" parameter (or general index of prices), so that the system of 'relative prices' finds again its equilibrium.

Inflation becomes, in this case, the *guardian* of the equilibrium of the system of relative prices, the guardian of that *'zero sum' of opportunities and incomes* which is the physiological tendency of any society (therefore it is not surprising if *social equilibrium* is identified with the same).

If therefore the acquisition of additional monetary income is maintained within the limits of the increase in productivity (or, more "Keynesianly", it is maintained within the limits of a reasonable expectation of an increase in productivity), inflation - if the nominal prices of the productivistic sectors do not go down (and if the real incomes of some other social sector do not go down, which accepts, by obligation or distraction, to be penalized in the dynamic process) - is inevitable: only that it is *physiological* for the guarantee of the system of 'relative prices' and the incomes systems.

In this case, therefore, inflation is not only a guarantee of social equilibrium, but also the instrument by means of which the benefits of development between productivistic and non-productivistic sectors, are redistributed, as well as between the participants in the fruits of these.

And since such redistribution is in the majority of cases (but not all, and at this moment it is not relevant to discuss these) a guarantee of further development, it can be claimed that in the given circumstances - rigidity of the nominal prices (in decreasing) and the tendential 'zero sum' of incomes - *inflation is even a guarantee of development*.

Thus we should not underrate the 'positive' role that inflation may have (as an effect of the re-distributive process of incomes), in the model of industrial society. And this by having recourse to the classical schemes of the functioning of the economic system: inflation guarantees redistribution, redistribution in turn guarantees an increase in purchasing capacity, and the latter guarantees the increase of productivity in productivistic sectors, which is the source of development.

All this is obviously because "barriers" have been created in the distributive process; for which reason redistribution does not seem - apart from exceptions and particular attenuating circumstances – possible via the reduction of the (nominal) prices of industrial products, but only via the increase of the (nominal) prices of services and primary factors (and of taxes).

3.3 The role of inflation in the re-distributive process in the service society model

This positive role of inflation (or even simply the 'rebalancing' role mentioned before) *subsists only if there are expectations of an increase in productivity of productivistic sectors* (which are the only ones to obtain it): which is constrained, as repeatedly said, to two conditions:

a. that there are further technical possibilities of innovation and increase in productivity (and from this point of view it is necessary to say that scientific and technological progress may be infinite, even if they may temporarily go through, sector by sector, stationary phases; for example, an automated industry may go through periods of stagnant productivity;
b. (more important still) that there is an expansion of the production of the sectors in question, pushed by an actual growing demand in consumption of the products of the productivist sectors.

The conditions given above are those in fact which characterize *industrial society* in its expanding moments; and their lack characterizes, on the other hand, industrial society in its “regressive” or 'post-industrial' moments, and thus - as we have conventionally called it here - the *service society*.[12]

In these conditions and phases (declining or *new*) of the service society, then, inflation no longer has the positive role which it has been allowed to have, on the basis of the mechanisms peculiar to the industrial society described above. In these conditions inflation

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[12] A beautiful analysis of the cost and benefit of redistribution policies, especially in connection with regulatory policies of the inflation process from one end, and with the occupational effect of the monetary planning policies at the other end, is that by Edmund S. Phelps (1972). From the same author see also the more recent consideration on the subsides policy in the occupational process (1997). Such policies, anyway, could be much more effective if framed in an evaluation of their total effect to be appreciated within a general planning policy.

'turns on itself' and does not get into gear anymore with production development.

It remains indispensable as a redistributing and rebalancing effect of the *few and concentrated* increases in productivity (high singularly but low overall) which are produced in the service society, but its propagation goes far beyond its role.

Inflation, in the service society, is no longer “physiological” (as said), but becomes 'pathological'; this happens not because the motivation for inflation of redistribution is lacking - in the way indicated - of the benefits of the increases in productivity of the productivistic sectors; but because of the particular structural characteristics in which this need for redistribution manifests itself, respectively, in the two models of society (as we to examine in the paragraph 5).

4. A short bracket: models of society and theories of capital

It is clear enough that the distribution I am referring to is the one among productive sectors, through exchange of commodities at given prices, and that I am not referring to the one between the primary factors of production within the sectors, i.e. between capital and labour. The latter is a 'classical' topic of economic theory (“classical”, “neo-classical” and, again, “post-classical”); but, in my opinion, it is pertinent to the structural change we are dealing with, only if it is true (as it claims, yet with scarce reference to historical evidence) that this change is a function of the investment choices of capitalists, according to the relative advantageousness for profit-seeking entrepreneurs, and thus of the profit rate, and not on the contrary a function of other factors, such as the changes in consumer demand or in technology. As is well-known, the first assumption produced an intense debate about the “theory of capital” (opposing Marxist-Ricardian-Sraffian and marginalist-neoclassical theoretical economists). But, short of mistakes, I have not found examples of these debates which do not unfold - so to speak - *sub specie universale et aeternitatis*, or that have gone deep into the relationship between “theoretical capital” and the more realistic capital used - in diverse stages of capitalistic production - in diverse sectors of economic activity with a very diverse capital intensity (e.g. our productivistic and non-productivistic sectors). In our case, the inter-sectoral distribution includes both capital and labour, not excluding though different variable effects among the two sectors within it. Yet, compared to intersectoral distribution, the inter-factor one seems to us historically less significant and more subordinated (*ubi maior minor cessat*), except when one considers the latter - we repeat - the general cause of the former (for which, however, there are no relevant historical analyses).

The capitalists, possibly surviving in the non-productivistic sectors, become participants in the banquet of productivity increases of the productivistic sectors, like their workers and all other non-capital-income earners. The profit rate of this sector is stable, *routiniere,* and we should ask whether it has the requisites to survive in such a stagnant condition. In fact, in the non-productivistic sectors of the service society the professional motivation emerges clearly as the motor of any personal committment. But where the capitalist's professional motivation is the profit, the growth rate of this profit (and not simply the stable rate) represents the *raison d'etre* of the pure profession of entrepreneur-capitalist (who, on the other hand, is more and more hidden in the productivistic sectors behind the financial capital actors). Is it conceivable that, in a climate of *routinieres* and stable profits and where the human and personal value of the achievements themselves becomes the *raison d'etre* of the initiatives, a profit-seeking entrepreneurship can develop? In a climate in which the quality of work becomes emergent, and the owner of capital is to a large extent replaceable by those contribute that quality?

Or is it not more reasonable to suppose a slow decline of this kind of entrepreneurship without prospects of increasing its productivity and profitability rates? In the experience of the *industrial divide*[13] do we not find opposite cases of sectors of small and medium-sized firms that enter the sphere of the sectors marked by high productiv-

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[13] This has been examined in charter five of the cited book on the *Associative Economy,* on the basis of a well-known work by Piore and Sabel (1984); we send the reader there for a deeper understanding.

ity and with very strong rates of innovation and resulting profit rates, and sectors of small and medium-sized firms where only professional quality does emerge, but whose profitability rates tend to disappear? And in the latter sectors of firms, is not the capitalist himself or herself a 'professional' motivated by interests which are very different from gain and profit?

In this sense, it can be said that also the conditions of profitability do influence the structural changes (together with the evolution of the demand for consumption and technologies), meaning that they can influence the permanence or the exit of entrepreneurs in the growing non-productivistic sectors. But it must be doubted that the theories of capital, of opposing 'schools', that have based their ananlyses on the assumption that the profit rate determines the change, were referring to this kind of circumstance.

In sum, we should ask whether the theory of capital, as has been discussed recently, is equally pertinent to the paradigm of industrial society and to that of the service society. And whether we should not, instead, go deeper into the structural conditions that can motivate the abstract behaviour, which that theory seems to be seeking to determine by very generalized positive analyses, which fatally become only generic.

5. Implications of the differential characteristics of the distributive processes in the two models of society, on the transitional management

Thus, as said in many ways, in the development phase of industrialization (i.e. of the passage of much production from the 'traditional' stage with very low productivity rates, to the industrial stage with much higher rates), the productivistic sectors tend to spread in comparison to the non-productivistic sectors. But in the development of industrial society, the productivistic sectors do not reach the point at which they tend, on the other hand, to regress proportionally, because of a certain saturation (as said) of the consumption of mass industrial products, in overall consumption.

In this way we have defined the *transition from industrial society to the service society*. In this latter model, perhaps the rates of productivity increase greatly; but they are much more 'concentrated' than before in some sectors which are exactly 'productivistic'; which reduces the rate of the average general increase of productivity.

Nevertheless in the model of service society - despite the aforementioned average reduction of the productivity increase rate - the redistributive needs increase and - how can it be said - the *intensity of redistribution* increases too, precisely because of the high level of concentration of the productivistic sectors, in comparison to the total amount of the productive system.

There is therefore overall *little to be redistributed in general, but where there is, there is a lot*. And *redistribution* in the case of service society becomes extremely important, and *strategic* for the survival of the system; since all the possibilities of obtaining improvements in income and welfare which were previously widespread in the capitalist production system, reside only in being able to spread, to the general benefit, the *limited but elevated* rates of productivity of the productivist sectors.

5.1. The analysis on the relationship productivity-prices in the transition from the industrial society model to that of service society.

In the model of *industrial society* in fact, the expansion of industrialization creates widespread possibilities of the increase of physical productivity (albeit with different gradations) in all parts of the economy where a mass production can be realized, a profitable accumulation of capital, and thus an advantageous search for profit. It is the need for redistribution which is 'concentrated' in the direction of and on the side of the non-productivistic sectors (which are both the traditional sector of the public services, and the traditional sector of 'non-mass' production activities which is undermined by industrialization and therefore becomes 'protected', in order to ensure its painless demise or its honourable survival, if the limited need for quality products survives).

But, apart from the need to redistribute to the advantage of the relatively concentrated non-productivistic sector, the model of industrial society is characterized by high productivity rates, which are not equal but *present in almost all sectors*, from agriculture to industry, from transport to the 'industrial' tertiary sector, etc. Redistribution occurs also *between* these sectors, but finds there everyone already participating, at least in part, 'on their own' at the banquet of productivity increases.

The redistributive mechanisms tend to realize only a 'flattening out' - and not always successfully - of the additional incomes (from productivity) for various categories of workers and operators (by means of the 'market' when the nominal prices of the non-productivistic sectors are increased; and by means of taxation on 'added value' or on 'income' to finance the non-productivistic public sectors).

In our analysis we are starting from a basic hypothesis, largely verified in real industrial society, that the nominal prices of productivistic sectors tend to stay still (if they do not increase) in the presence also of strong increases in physical productivity rates, which would instead justify their reduction. This is because of the strong tendency of any entrepreneur to 'profit' from (it should be said) any technical innovation - from the biggest to the smallest and most imperceptible - which he will introduce in *his* combination of productive factors, i.e. in *his enterprise* with the effect of reducing unitary costs.

On the other hand, we might also ask how the entrepreneur could be stimulated to look for and introduce new techniques and new production systems, if there was not at least the expectation of obtaining *extraordinary occasional profits* at a much higher rate than the normal rate of interest, or even standard of average profit.

The case of a reduction of nominal prices of productivistic sectors, as a consequence of a marked increase in productivity, has taken place at times and in cases when some inconvenient competitor was to be 'expelled from the market' having not yet adopted similar productivistic innovations. Apart from the temporary nature of the operation this is a case which has been largely replaced by that of the oligopolistic 'trustees', and by that of price 'umbrella' policies which, with the presence of marginal firms, ensures high rent positions for the non-marginal firms and innovators. The case of a reduction of nominal prices following increases in productivity is practically by now only part of historic memory.[14]

With high rates of general price inflation, the productivistic sectors, if they benefit from productivity increases, have, if anything, increased nominal prices *less so* than the non-productivistic sectors; which means that they have reduced the 'relative prices'. But the non-occurrence of the reduction of nominal prices has meant that the necessary redistribution of the benefits of *their* physical productivity, could take place only through inflation.

Thus the inflation is as high as is the gap between the nominal price and the 'relative' one. If the nominal price does not move (go down) the relative price will fall more than it would if the nominal price went down as well.

If the nominal price (of the productivistic sector) rather than diminishing, for one reason or another, were in fact to increase, then the gap between this nominal price and the relative one (which will express, in fact, the rebalancing of the relative prices) will be even greater.

In other words, the less prices in the productivistic sector reflect productivity gains with their reduction, the more the non-productivistic sectors will increase their nominal prices in order to rebalance the system of relative prices: and thus the higher will be the rate of general inflation. (To these factors, more than to others widely exposed in some theories, I consider there is to be attributed

[14]Today is largely evident that the price 'regime' is far from being a 'market price' regime, such as we might have experienced at the beginning of the 19th century (and even this is doubtful if we consider what Sismondi, Pellegrino Rossi, List and many other 'liberal' but not 'laissez faire' economists were saying at that time. This makes yet more amazing the survival of economists who persist in dreaming of the utopia of a regime of prices determined by a mythical or irrecoverable 'market'. This is a sign that the persuasive force of myths (ideological and religious) is still a reality which influences analyses; and this put into question many theorems on the human rationality. . . (for an extended critical examination of this literature I will suggest again the work of G. M. Hodgson, which offers a very useful summation of the methodological objections to the this type of approach (Hodgson, 1988).

the rather widespread and recurrent fact that periods of marked inflation and turbulence are associated also with periods of strong structural change in the economy, and vice-versa periods of monetary stability are associated with marked structural stagnation.)

In industrial society, at equal conditions[15], therefore, the redistributive factor of the benefits of productivity is an inflationary factor, to the extent to which the productivistic sectors are not able to distribute these benefits through their nominal prices.

The gap between nominal and relative prices constitutes, simply, the inflation coefficient.

5.2 Factors and circumstances which may limit the inflationary effect of productivity in the industrial society model

Two factors mitigate the inflationary transmission described:

a. the incomplete rigidity of nominal supply prices of the productivistic sectors;
b. the incomplete rigidity of nominal supply prices of the non-productivistic sectors[16].

[15]I would like to emphasize here the schematic value of the argument which does include more articulated and specialized cases which obviously enhance and render less plausible a good part of the argument itself; but it is not exactly necessary to examine these cases because our intentions are far from developing here a sort of 'treatise' on inflation. For an extended treatment of the question in relation to the globalization process, I would like to suggest a recent volume of essays by Davidson and Kregel (1999). See also other essays edited by Kregel (1989).

[16]It will not be difficult to notice that in this rough analysis of the distributive process, we overturn the conventional approach which theoretical economics is used to adopting for analysis of the market: here we consider the 'normal' theoretical model (of industrial society) that of the rigidity of prices, and the imperfection (or anomaly) that of non-rigidity. Perhaps we could say that here is based totally the difference between 'classical' economics and 'institutionalist' economics.

The two phenomena, nominally identical, are located in very different contexts and are activated, motivated and regulated by very different factors. They must therefore be dealt with in a completely separate way.

With regard to factor a), despite the hypothesized rule (and largely confirmed by past and present reality) there may be cases in which also the nominal prices (of the productivistic sectors) tend to decrease if in the presence of strong increases in productivity in the sectors in question.[17] Any distribution of the increases in productivity (where obtained), by this route, reduces the inflationary rate of the standard redistributive process described above.

With regard to factor b), which is indeed more probable and realistic in many experiences, some non-productivistic sectors (in particular those destined to disappear in the period preceding their extinction but also some more stable and durable ones, or which are even capable of some dynamism towards growth) agree to not participate in the 'banquet' of productivity increase; that is they agree to not adjust their nominal prices (and incomes) to the incomes of the productivistic sectors. All this is possible, but is articulated in a complex number of cases, on which various factors operate.

First of all there is the (special) case of labour incomes which are created in the same productivistic sectors when in the presence of marked increases in productivity. The hypothesis that the workers of these sectors do not claim a wage increase proportional to these increases (and therefore to the rates of increase in profit and other possible capital incomes) is possible, but always problematic.

The matter would be less problematic if the workers and trade unions in the sectors with marked increases in productivity realized that such increases translate into a reduction of the nominal supply prices of the products involved; but if this does not happen, there will always be the demand on the part of the workers to participate in the banquet - more or less in proportion to their share or contribu-

[17]It is a question of the behaviour that, according the theses of academic economics is considered obvious and normal behaviour.

tion - at least at the level of the productive units in which increases are realized.

On the other hand, it is more than probable, as has often happened, that the same entrepreneurs in the sectors in which marked increments in productivity are realized, prefer to have their own staff participate at the banquet (perhaps in differentiated forms because of the group's proximity to power and the relative advantage of managerial power, as happens in any 'autocratic' society worthy of the name) rather than appropriate - the entire value 'added' from the progress of productivity without transferring it on the prices. In this way the classic 'corporative' collusion is produced which may find a way of being accepted by the sectors less favoured by the progress of productivity, and by the non-productivistic sectors, at least for a certain period of time.

Obviously, we are referring here to the general case of productivity progress *in the presence of expansion* in the production of productivistic sectors, which is the standard case of industrial society; the general case of productivity progress in the presence of non-expansion, and even of reduction, of the activities of production (which are the known cases of restructuring and reconversion implying the general reduction of the work force and dismissals) in reality has as an effect:

– either a paid surplus of workers: and therefore the measurement of the increase of productivity is confused and compromised (in the name of a solid redistribution of costs);

– or an effective reduction of the personnel: and therefore there are cases in which the remaining personnel benefit from unitary increases in wages, as in fact their participation in the banquet.

If what we have called 'corporative collusion' (in comparison to the distribution of the benefits of productivity increases) is accepted by the others, then this is translated proportionally (as said) into a reduction of the inflationary transmission inherent in the redistributive process, since in this case there would be no such process.

But this case too is somewhat problematic. In fact a reduction of relative prices (and incomes) of the less favoured sectors or non-productivist sectors is very difficult if it involves homogeneous categories of workers. It is possible to not let some ‘social’ categories participate in the banquet (for example, the manual workers in comparison to professionals, civil servants in comparison to business men, etc.); but it is unlikely that proposed agreements on the 'gaps' in real wages (albeit camouflaged by a non-variation of nominal salaries) accompanied by an absolute worsening in living standards can be accepted by workers who are approximately homogeneous, professionally and socially (by education, social extraction, technical qualifications, etc.) but which operate in sectors with differentiated productivity increases.

In these cases, not even the known and debated 'segmentation' of the labour market exercises much its effects. Even if such segmentation is an indisputable reality from the structural point of view (thus separating women, migrant ethnic workers, what remains of pre-industrial social classes, etc.), and has distant historic roots, it does not serve to differentiate and exclude - if this is the case - the participation of such categories at the banquet of productivity (whilst maintaining the baseline differences).

And nor does the territorial separation of the labour market still exercise a role in the majority of industrial countries. Furthermore – if there were not all these reasons- trade union organization, which is a great transmitter of information and evaluations, would be enough to make impossible the passive acceptance of a reduction of the 'relative', i.e. real, incomes of some categories of workers in comparison with others (only because they belong to sectors with different 'productivity').

To the extent, however, in which a certain 'impermeability' of the labour markets permits the avoidance of the imitative and propagating effect of salary increases in the non-productivistic sectors, in comparison with those of the productivistic sectors, even this is translated into a reduction of the inflationary transmission.

6. Inflation and “unemployment from productivity”

From the inflationary point of view, the factor which has on the other hand a definite effect of attenuation of inflation in industrial society, is “unemployment by productivity”.

In effect, if the workforce 'freed' from the process of increase in productivity in the productivistic sectors does not find employment in 'new' productivistic sectors (which is the standard case nevertheless of industrial society) it cannot but weigh - albeit in a different way - on the (nominal) monetary incomes of the workers of the productivistic sectors. And therefore, whatever the stability or even increase in the monetary wages of the latter, the process leads finally to a reduction of the real wages and salaries of the workers in employment.

This is the case in which (nominal) monetary distribution results from the effects of productivity, without the push of the wages, salaries and incomes of the non-productivistic sectors. It is as if the obtained greater productivity (of the productivistic sectors) was distributed also to the non-productivistic sectors: but not by means of an increase in the wages, salaries and real incomes of these latter sectors, but rather by transferring the additional margins of real profitability (without allowances) to the new category of workers omitted from the productive process: the workers 'unemployed by_productivity'. (“Unemployment Boom” as somebody - Dahrendorf if I remember well - called it).

In this case the inflationary effect not only is attenuated, but is also eliminated: but on the condition in fact that the transfer of income realized is exactly proportional to the increases in productivity, and that the income and consumption of the unemployed does not exceed the real reduction of the income and consumption of the employed, whilst in the presence of their stability or increase in monetary wages, which become, so to speak, 'unitary family salaries' (per person, pro capita, by working hour)[18].

[18]In this note we would like to point out how interesting it would be to develop suitable statistical enquiries, more or less samples, in order to know the real personal and 'family' conditions of many of those 'unemployed by productivity', and on the strength of what monetary income they continue to live. It is a shame that enquiries of this type are, in almost all countries, seldom develo-

Any way of financing unemployment (allowances, integrations, etc.) which weighs on the incomes of productivistic sectors, without the benefits of productivity being transferred to the monetary prices, has however an inflationary effect.

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