

A supporto della candidatura di Celso Furtado al premio Nobel *

I am delighted to hear from you about your initiative. I formally express my full agreement and, of course, give the permission to attach this letter to the dossier to be delivered to the Prize Committee in Stockholm. I consider an honour to be asked to comment on the work of such a distinguished social scientist as Celso Furtado. Furtado, in my view, has mostly the merit of an integrated vision of economic thought. There have been periods, in the history of economic thought, when the highest scientific return came from insights into limited subjects, such as the accelerator, the multiplier, the input-output analyses and their statistical and mathematical refinements. It was not fortuitous if Joan Robinson defined Economic Theory as a “tools’ box”; and if this definition got wide approval during a good span of time. In the fragmentary state of economic studies following the crisis of the “neoclassical synthesis”, the highest marginal utility, in the scientific sense, should be recognized, rather, to the integrative contributions. Innovation may spring more probably from there than from “technical” originality according to the criteria corresponding to single academic sub-disciplines. That’s why I so much agree with Furtado’s nomination; and hope to be successful in pointing out some highlights of his work.

An integrative vision in Furtado grew gradually, in the effort to find answers to the problems he faced during his initial experience as an economist of CEPAL (ECLA) in the Fifties. His doctorat in Paris (with Professor Byé) dealt with international economic relations from a historical point of view; but the spur to the theoretical work came to Furtado from practical needs of his own country: mostly finding out solutions to the chronic unbalances of international payments, inflation in Brazil and the whole Latin America, endemic poverty in Brazil’s Nordeste, the choice between political resoluteness and *laissez faire*. Furtado is generally appreciated as a student of underde-

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velopment. This reputation may be misleading if it is meant as a specialization either by geographic zones or about narrow subjects.

In my view, Furtado has, instead, engaged his skill with regard to the whole body of economic knowledge; and his contribution cannot be properly understood, if it is not assessed according to its real width. In fact, it is a contribution to the revision of the “paradigm” of Economic Theory; certainly an etherodoxical standing, but rooted in a distinguished tradition, including economists such as Gunnar Myrdal, François Perroux, Nicholas Kaldor, Joan Robinson, Piero Sraffa, Paul Streeten and, of course, Keynes, Schumpeter and Allyn Young. To give an account of all this in a short comment is obviously impossible; so, I will concentrate on one aspect only: the contribution of Furtado to what is usually and broadly defined as economic dynamics.

The cumulative process

According to Furtado, economic process is cumulative and alternates periods of acceleration and deceleration. I will primarily refer to *Teoria e política do desenvolvimento econômico* (1969, 2000) and to *Pequena introdução ao desenvolvimento. Enfoque interdisciplinar* (1981). Myrdal, too, noticed that economic process is cumulative in *Economic theory and underdeveloped regions* (1957). He pointed out that economic differences between strong and weak areas tend to grow. Furtado’s development studies are, in a sense, an accurate control of Myrdal thesis, greatly developed independently. Furtado has introduced many original elements in this analysis. First, his development theory is built empirically, step by step. Before *Teoria e política do desenvolvimento* appeared *Formação econômica do Brasil* (1959) and *Formação econômica da América latina* (1969); and, from 1949 to 1957, many studies of applied Economics (statistical, econometric, descriptive and theoretical) carried out as a member of CEPAL. In Furtado’s work, abstractions are previously applied to limited topics, which allow an accurate control. Only after this control, they are assimilated into a model. Sometimes, generalizations emerge, by inductive inference, through the very historical reconstruction. So, the process of international division of labour (also involving the areas later called “underdeveloped”) is analysed very precisely in a way which remembers the methodology followed by Simon Kuznetz in the elaboration of his historical statistics. The rising movement and the descending one in the cumulative process are really analysed and not only sketched, as in Myrdal’s model (this last was substantially given up in the following prominent historical-empirical-theoretical study, *Asian Drama*,

1967). The previous before mentioned Myrdal's study of 1957 showed the irrelevance of the dominant trade theory in front of the problem of "underdevelopment". The reasoning was, then, elaborated in an abstract form, essentially as a confutation of equilibrium, as it was applied to International Economics. In Furtado, taken well for granted all this, there is instead a detailed analysis of both the ascending cumulative process of the nations which got industrialized and the descending cumulative process of those which became underdeveloped (in the special Furtado's sense, which will be explained later).

The ascending movement in the cumulative process

This movement is analysed focusing the relationship among innovations, accumulation, income distribution and the composition of demand. The innovations are a source of accumulation, originating profits which can be re-invested. It would be, however, a mistake to see a one way relation between innovation and accumulation. If innovation yields accumulation, it is true that accumulation yields innovation, too. This is true in two senses: either because innovation demands generally money or in the sense that accumulation (that is growth of the physical capital's stock) brings with it various forms of scale and external economies accruing to the operators who enjoy them together. It is not fortuitous that the *diffusion* of innovation rests almost exclusively on the available stock of capital. But their formation is also strongly influenced by accumulation, given the long term investments and the favorable environment they usually need. Formation of innovation depends upon technical progress which is – at a certain degree, not easily valuable – an independent variable. Considerable importance presents the income distribution, too. It was, e. g., a favorable income distribution for capitalists-entrepreneurs to support the waves of investments at a first stage of industrial revolution in England. Income distribution is relevant not only for the accumulation but also as concerns the formation and composition of demand. The composition of demand is another cornerstone of growth; on it – besides the structures of the offer – rests the destination of resources available for investment. Now, a crucial aspect of demand's composition, in the central industrialized areas, has been its tendency to diversify, owing to the growing monetary mass available for workers. This diversity has brought to a diffusion of innovation, extending to the mass of people the sort of consumption before reserved to the privileged; it has come from the pressure towards a more egalitarian income distribution. That pressure exerted an influence on innovations, not only as concerns their diffusion but also their

formation. Higher wages were, in fact, an incentive for the substitution of machinery based on innovation to human work. So, the analysis of the cumulative process sketched by Myrdal received an historical-analytical corroboration with regard to its ascending pattern. The same can be said as concerns the descending path.

The descending movement in the cumulative process

In the course of a falling cumulative process, savings of poorer regions tend to flow towards the regions more advanced and rich, where are available easier and more profitable opportunities for investment; so, the most qualified workers migrate into the “centres” (*brain drain*); free market and the widening of exchanges often give such competitive advantages to the firms in expanding centres already established – normally working in a state of increasing returns – that even workshops and industries already existing in other regions are suffocated. These effects (polarization, arrest and reflux) which oppose the weak pushes towards diffusion, were analysed in *Economic theory and underdeveloped regions* by Myrdal. Furtado has widened the institutional aspects of the analysis. As a Latin-American economist he assumed the problems he faced in that area as a starting point: first, the evident asymmetry between the external demand’s behaviour and the high income/elasticity of the internal demand. It was necessary to analyse this asymmetry originating chronic crises in the balance of payments and also a kind of inflation, difficult to interpret in monetary terms only. Furtado acutely studied the internal effects of polarization, arrest and reflux; and, in so doing, he utilized the theoretical background employed in the analysis of the ascending cumulative process. One of the probable reasons why abstract analysis, even devoid of a real content, has so long prevailed against realistic work, is that Economics tends to universality, and realistic analysis is obviously less general. But, by looking at generalizations not as a starting point, rather as a target, it is possible to re-concile them with realism, as it is demonstrated by the work of Myrdal, Kaldor and Furtado himself. Given the width and fragmentation of the subject, integration can only proceed slowly. In studying the asymmetry before mentioned, Furtado passed through different stages: in a first period, from 1949 until the second half of the Fifties, he came, as a CEPAL economist, to the idea that balance of payment’s crises in Latin America were chronic. The foreign currency scarcity was a consequence of the ascending cumulative process in developed economies; as technological progress advances and people live better, the terms of trade tend to get worse for raw material’s producers. The demand of these goods becomes less elastic,

while the demand of imported goods remains high. Moreover, if the “peripheral” country is engaged in industrialization, it will have to get instrumental and other intermediate goods abroad, undergoing tensions on international payments. In countries so dependent on imports, frequent devaluations are only added to the numerous other factors of inflation. Up to this point, the integrative effort, as it was for Myrdal, has necessarily to take into account social conditions and the power, according to an interdisciplinary approach. The process is not socially neutral. Given the rigid social structure that Latin America inherited from the past, only a narrow class had devoted itself to the export of primary goods. Income was partially transformed in the purchase of imported luxury goods. Even if the low level of the whole income is not considered, this concentration in income distribution is disadvantageous for the internal market formation. The classical theory of international trade asserts that areas should specialize looking at comparative costs: that is, in those goods whose production needs more intensively the use of factors which are abundant in these areas. Furtado objected that, being things as they are, it is impossible to get to any conclusion without taking the “structures” into account. Without an adequate knowledge of the agrarian structure it would be impossible to understand rigidity in the offer of food in certain economies; without an analysis of decision system, whose control can be in the hands of foreign groups, it would not be easy to understand the orientation of technological innovation; without the identification of structural dualism it would not be easy to explain the tendency to income concentration, etc. These “extra-economic” factors – system of land property, external control of firms, part of the population being outside market economy – complement the structure matrix of the model the economist works with. Even when the “mono-production” brings with it an enormous income (as it has been the case for some oil producer countries), the result is only an economy generally subventioned, as the effect in terms of structural change can be inexistent or negative. The reasons why exporting “mono-production” does not produce articulation has been skilfully explained in *Formação econômica do Brasil*, where it is shown the analogy of slaves with the fixed costs of a plant (their consumption not creating a market) .

To sum up, the cumulative descending process is analysed by examining the disconnectedness among the same factors which appear connected in the ascending cumulative process. This is a good example of integration in economic analysis. Technological innovations do not fit well for “peripheries”, being modeled on the factor combinations in the “centres”; here, given the wage levels, tend to be labour saving. Historically, the effort to do the first steps in development has so tended to grow in the long run on account of the

threshold effect depending upon the degree of accumulation, organization and skill reached in the countries at the head of technical progress. The low income groups take as their reference groups those at a higher income. If needs, expectations and aspirations generated by additional income grow more quickly than the control on resources – as an effect of comparison – increase in income is followed by losses in welfare. Through these demonstration effects, international inequality produces, then, distortions in consumption, all the more as unbalanced development of consumption and needs to the North often goes with the formation of a class of privileged to the South. Accumulation is so hindered either by bad income distribution or other structural rigidities; and this, in its turn, stops innovation. To be even more syntetic, Furtado says that it is impossible to build a valid development theory and a correct analysis of international economy if, to say so, the “functions of response” of the various national and regional economies are not identified. It is noticeable that many crises in Latin America have been anticipated, thanks to this historical-structural-analytical study of these “functions of response”, by Furtado, when he was a CEPAL young economist (see: *La fantaisie organisée*, 1987). It is not only a question to identify an internal historical heritage. It is demonstrable that a typical aspect of “underdevelopment” is a chronic unbalance between demand and offer of factors of production, owing to the fact that a peripheral economy has been forced to insert itself in world economy and, though often receiving an impulse from it, has been lacking the means in order to adapt these influences to its specific features and needs. This, at least, has been the most frequent case. Underdevelopment is not simply a stage or phase preceding development, as its essential feature; the chronic unbalance between demand and offer of factors, would be inconceivable without the worldwide partial and unilateral diffusion of industrial capitalism. In short, in present peripheral countries, there is usually only a partial, extrovert modernization, based on interpenetration among technology, consumption and other behavioral patterns so induced by the “centres” with “peripheral” traits. It is so that the descending movement has become generally cumulative.

Methodology and Scientific Style

Once rejected the claim of an economic science absolutely exempt from values, advanced by Robbins in his *Essay* of 1935, and so long accepted by the economic establishment, the only true rigour of economic studies consists in a conscious “going and coming” between problems and analysis or,

as Paul Streeten put it, between programmes and prognoses: problems and programs raise the questions, analyses or prognoses the answers. Rigour in science, as Karl Popper demonstrated, means “falsification”: that is, submitting the enunciations to the most severe controls (logical and empirical), in order to see which of them survive as acceptable propositions. It is not possible, then, to consider adequate: the effort of axiomatization *quo tale*, the simple search for statistical correlation, the use of fragments of theories which seem to meet with the tendencies of the time, or even simply to adhere to a given *corpus* of doctrine, declaring themselves, e. g., neoclassical, marxist, keynesian or post-keynesian or even “mathematical economists”. All that tends to immunize certain positions, by protecting their assumptions from criticism (according to the well known Friedman’s sophism); and has often little to do with scientific methods in spite of the exhibited imitation of natural science. It is very different to reach originality, like Furtado, through a careful, value oriented, long work of empirical and analytical integration. Even from the very short synthesis it has been attempted, it should appear that Furtado has given a considerable scientific consistence to the model “centre-periphery”: an initial insight by Raúl Prebisch. Unfortunately, during the Seventies, an ideological use of this model gained an enormous diffusion – often utilizing not properly the same Furtado’s results. This was the case of A. G. Frank and of his many followers; and this has caused such serious misunderstanding so as to induce the historian David Fieldhouse to put Furtado among the neo-leninist students of imperialism! (*Politica ed economia del colonialismo*, 1979, p. 15) This is absolutely false. Even aside from the logical-experimental, and not ideological character of his method, Furtado focuses so much and so naturally on economic policy to prevent himself from involvement in any tendentious determinism. It has come, rather, that the intrusiveness of very factious versions of the model “centre periphery” in the public debate had made almost impossible, for a long time, to see the sense and width of the rigorous version of it. It would be enough to mention that the unified analysis of innovation, accumulation and demand, is obtained merging the tradition of classical economists (including Marx) with Schumpeter, Keynes and the Keynesians. Economic “dynamics” meant as “dynamization” of static models has produced very limited results. *Teoria e politica do desenvolvimento* suggests a much more promising way. I have omitted many aspects of Furtado economic contribution, from his original study of economic cycles to the analysis of inflation, the criticism of classical and neoclassical models and his original ideas in economic policy. I add now only a hint of his interesting study of the “excedent”. The ascending cumulative process is marked by a *surplus* re-invested. It is this which gives a

“self-propelling” feature to it. There is, however, the tendency of a single group of goals to prevail: those of instrumental rationality. Human creativity becomes, as a consequence, deformed, which reminds us of the various analyses of alienation diffused, among sociologists and philosophers, during the Fifties and the Sixties. Furtado shows, once more, opportunities of integration between economic analysis of growth and these broader areas, as it can be seen in his *Créativité et dépendence* (1981).

In his article *What's Wrong with Contemporary Economics?* (“The Pakistan Development Review”, Autumn 2000) Paul Streeten has carefully considered the limits of the present academic studies in Economics and recommended an interdisciplinary and multidisciplinary approach. He has indicated good reasons for refusing the criptoscience which conceals its value premises and irrelevant axioms behind the curtains of mathematics, sophism and tautology. That is the reason why I presented Celso Furtado as a social scientist instead than simply as an economist, at the beginning of this letter. According to Streeten’s diagnosis, I wished to underline his particularly valuable contribution to overcome the present crisis of economic thought.