ON THE RELEVANCE OF TRADITIONAL ANALYTICAL TOOLS IN STUDYING BRAZILIAN ECONOMIC PROBLEMS

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"The fact that normal and practical solutions are certainly not intellectually attractive to economists does not alter the fact that statesmen responsible for the conduct of the country's economy have no alternative but to adopt them." — EUGÊNIO GUDIN [1]

One finds two types of intellectually frustrated economists in Brazil. The first type is impatient with his discipline's theoretical apparatus because he feels it to be irrelevant in analyzing and coming to grips with current Brazilian problems. He feels that the great bulk of economic theory was developed as a generalization of the experience of Western European countries and the United States and that it has therefore little validity for understanding the Brazilian reality or the reality of most other economically underdeveloped countries. [2] The second type of econo-

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1) Professor Gudin's comments on R. Nurkse's paper in Ellis, Howard S., and Wallich, Henry C., (eds.), *Economic Development for Latin America*, London; Macmillan & Co. Ldt., 1961, pág. 269.

2) The writings of Celso Furtado have had great influence on this viewpoint. In his well-known chapter "Elementos de uma Teoria do Subdesenvolvimento", he states that "... O subdesenvolvimento é, portanto, um processo histórico, e não uma etapa pela qual tenham, necessàriamente, passado as economias que já alcançaram grau superior de desenvolvimento. Para captar a essência do problema das atuais economias subdesenvolvidas, necessário se torna levar em conta essa peculiaridade..." (págs. 180-1). And further on he concludes that "... Como fenômeno específico que é, o subdesenvolvimento requer um esfôrço de teorização autônomo. A falta dêsse esfôrço tem levado muitos economistas a explicar, por analogia com a experiência das economias desenvolvidas, problemas que só podem ser bem equacionados a partir de uma adequada compreensão do fenômeno do subdesenvolvimento. A tendência ao

mist is deeply appreciative of the body of economic theory as it has been developed up to the present time; he marvels at its logical framework whose aim it is to show one can maximize production and consumption by a rational allocation of resources. He is frustrated because Brazilian policy makers have mostly ignored what would be sensible policies based on rational economic analysis. [3] The first will reject economic analysis in its present form because it does not reflect the Brazilian reality, while the second will reject the policies used because they are not based on good economic analysis. For shorthand purposes, let us call the former "revisionists" and the latter "traditionalists". [4]

THE BRAZILIAN INDUSTRIALIZATION AND INTERNATIONAL TRADE THEORY

The best example of the dissatisfaction of both groups centers around the debate over the industrialization policies which the Brazilian government adopted during the decade of the 1950's. The characteristics of this industrialization was that of an indiscriminate import-substitution policy, aiming at maximizing the internal vertical integration of industry. [5] In other words, it was an autarchic policy of import substitution, disregarding any consideration of current or potential comparative advantage in choosing what industries to protect.

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desequilíbrio no balanço de pagamentos é daquelas que, à falta de um marco teórico adequado, mais tem sido incorretamente formuladas e mal interpretadas nos países de economia subdesenvolvida, como no caso do Brasil" (pág. 192); see his *Desenvolvimento e Subdesenvolvimento*, Rio de Janeiro; Editôra Fundo de Cultura, 1961.

3) A good example of this can be found in the writings of Roberto Campos, when he comments on the control of inflation: "... a lot can be done by fiscal and monetary weapons to correct bottlenecks without additional investment that would merely aggravate excess demand; this can be done simply through the alteration of price incentives and reorientation of government investment... Nor can it be assumed, as many 'structuralists' assume, that a reduction of the over-all investment level in the course of stabilization programs is detrimental to growth... this reduction may be purely temporary, soon reversed by an upsurge in investment...", in Hirschman, A. O., *Latin American Issues: Essays and Comments*, New York: The Twentieth Century Fund, 1961, pág. 79.

4) The best critique to date of traditional theory's relation to developing countries can be found in Seers, Dudley, "The Limitations of the Special Case". *Bulletin*, Oxford University Institute of Economics and Statistics, May 1963.

5) See Baer, Werner, *Industrialization and Economic Development in Brazil*, Homewood, Illinois: Richard D. Irwing, Inc., 1965, chapter 6.

The revisionists accept these policy measures as having been inevitable due to the trends in world trade, which have made it impossible for primary exporting nations to grow at a satisfactory rate if they retained their traditional economic structure. They accordingly reject the theory of comparative advantage as relevant for developing countries, since according to its criteria of efficiency the presently underdeveloped countries would continue specializing mainly in primary products. This would be prejudicial to those countries, since they would forever depend on the rate of growth of the dynamic industrial centers of the world, over whose fluctuations in activities they have no control (i.e. they would continue to be reflexive economies, always reacting to outside events), and their growth rate in the long run would not be too promising because of the familiar downward trend in the rate of growth of primary products in world trade. More violent revisionists will even go so far and say that the theory of comparative advantage is a disguised theory of exploitation, since they believe that in the long run the terms of trade will continue to turn against the primary producing areas of the world, which means that the poor countries of the world will have to give up even more resources than in the past per unit of import.

The traditionalists are quite vehemently critical of the policies followed by Brazil in the past twenty years. They claim that it would have been far better for the country to allocate its scarce investment resources in such a manner as to increase the efficiency of its export sector and, to the extent that industrialization was necessary, to have chosen the few industries where the greatest potential comparative advantage lay, such as textiles and other light manufactured products. They see the autarchic policies followed as an absurd waste of resources, forcing the country to pay a high price in terms of forgone opportunities.

It should be obvious that each side of the debate can be associated with an intellectual tradition going back to the early 19th century. The revisionists taking their cue from Hamilton, List and their followers in arguments based on infant industry protection, rejecting comparative advantage due to its static nature. The traditionalists, of course, fall into the intellectual tradition of Ricardo, Haberler, and Viner, who firmly believe that the maximum world production and welfare can only result from absolutely free trade.

A careful study of the events of the last two decades in world trade and of the policies followed by Brazil will reveal that neither camp is completely justified in its position.

The basic idea of the theory of comparative advantage was first demonstrated with a two good, two countries example. It was shown that a country, whose absolute advantage prevailed in both goods, had an interest in specializing only in the good where it had the greatest comparative advantage, if it wanted to maximize its welfare. In the case of many goods, the division of labor would presumably take place by making a list of goods in descending order of comparative advantage for the first country and dividing up the production so that there would be a fair distribution of the gains from trade for each country. "Fair", of course, includes some notion of the relative bargaining strength of each side.

Viewing the world in a dichotomous way, developed vs. underdeveloped areas, it could be argued that the division of labor which existed at the end of the second World War or in the 1950's was rather archaic. It was based on a possibly "fair" division of labor in the conditions prevailing prior to the first World War, in the sense that the participation of food products and raw materials in world trade was large enough to make the underdeveloped world's dependence on the latter seem reasonable.[6] By the 1950's, however, the importance of these products in world trade had declined considerably. The world as a consumer of internationally traded products had changed its tastes and consumption habits, placing more emphasis on manufactured goods. And thus the traditional divison of labor became "unfair" in the sense that it was weighted in favor of countries producing manufactured items.

These changing circumstances should have led the true believers in the theory of comparative advantage to advocate a drastic alteration in the world division of labor. They should have advocated the creation and/or expansion of the textile products, food products, and other light manufactured products industries in the underdeveloped areas, while recommending a drastic reduction of and/or elimination of these industries in the developed world. The latter would then have concentrated exclusively in heavier and more complex industrial products. Such actions

6) The weight of the then underdeveloped world in terms of its population size was considerably smaller, since many of its areas consisted of primitive self-sufficient economic units, with no ties to international trade.

on both sides would possibly have brought on a satisfactory rate of growth everywhere and would have guaranteed a more efficient allocation of resources in the world in accordance with changing global demand conditions.

Unfortunately the developed world has neither in the past, nor at present, been willing to undertake these necessary structural changes in its economy. This lack of cooperation on the part of the *developed* world explains partially why developing countries were forced to adopt more autarchic development policies, i.e. creating well-rounded industrial parks and thus, in essence, following the balanced growth dicta of Nurkse. [7]

One could say to the revisionists that conditions which lead to the import-substitution policies adopted in Brazil do not necessarily refute the traditional theory of comparative advantage, but that in a devious way events were quite consistent with the theory — i.e. changes were necessary, but changes which would have been consistent with comparative advantage and maximum growth were impossible due to the rigid attitudes of developed countries. [8] The answer to the traditionalists, of course, is that the policies followed by Brazil and similar countries do make good sense, when considering the actions of the developed countries which made a rational world allocation of resources extremely difficult.

The above line of argument was developed mainly to throw some cold water on the extreme ideological positions I have often found in discussions with Brazilians of various persuasions. It would, of course, be nonsensical to claim that the Brazilian industrialization does not present some serious theoretical issues and/or challenges.

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7) When I speak of autarchic balanced growth industrialization policy, I am referring to countries which are large in terms of population and have a natural resource base adequate for such industrialization policies. I am not trying to defend the small countries in the underdeveloped world which try to put into effect industrialization programs for which there is neither a market nor a natural resource base.

8) Harry G. Johnson, whose criticisms of autarchic import substitution policies are well-known, has also come around to this line of thinking. In a recent book he states that: "... The new lines of thinking on industrialization policy represent a considerable improvement in economic rationality over the earlier autarchic cast of development theory; but for that very reason they imply a need for reform of the commercial policies and conventions of the developed countries that the older development theory did not. ... The old 'inwardlocking' industrialization was thoroughly consistent with the protectionist philosophy and practice of developed nations...", in *The World Economy at the Crossroads*, Oxford: Clarendon Press, 1965, pág. 83.

Assuming no international barriers to rational specialization, how should a country choose the new sectors in which it will specialize? Some economists have argued that it is impossible to know where the greatest potential comparative advantage of a developing economy lies, and that therefore a period is needed in which a whole range of new sectors would enjoy protection. After such a period an evaluation could be made as to which sectors would be worthy for further encouragement and which deserved gradual extinction. This could, of course, be achieved by gradually lowering tariff and other barriers in all sectors, assuming that the healthiest sectors would survive. The big question, however, revolves around the time period adopted (I am leaving aside the political difficulties of killing non-growing infant industries) in which factors of production have time to acquire the necessary skills for effectively resisting foreign competition. There is also the question of the time required to reach the necessary economies of scale for effective competition. The latter, however, is a question for which some degree of effective planning can be made.

It seems that instead of rejecting or doggedly adhering to the theory of international trade, the issue is really of how to expand it. That it is a static theory, that efforts should be made to dynamize it, are old propositions, but little efforts have been made to make advances in this direction. [9] Possibly the lack of success is due to the fact that economists have a rather narrow view of their discipline. For example, it would be interesting to measure some of the indirect effects an industrialization policy has. We usually talk about the "external economies" this process produces — changes in the skills of labor, in attitudes of labor, in organizational skills of management, in pressures to reform an educational system to provide a new type of labor force, etc. Little is known specifically at present about such effects. Possibly new methods should be found to quantify them, using tools of other disciplines, if possible. Once full account is taken of the indirect effects of an industrialization, these could possibly be integrated in a calculation of the returns of an industrialization policy and a judgment of the benefits vs. costs based on such calculations might turn out quite different from traditional calculations.

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9) I am not sure if the writings of Nurkse, Myrdal or Prebisch can be thought of as developments of the theory. I would classify their writings as valuable critiques of the theory. Their positive contribution is a development strategy, assuming a breakdown of an adequate international specialization. But the latter do not constitute a reformulation of the theory to account for potential changes in comparative advantage. I owe these qualifications to a discussion with William Cline.

DANGERS OF THE PARTIAL VIEW

Both the revisionists and the traditionalists in Brazil have frequently fallen into the trap of making policy recommendations (and sometimes succeeding in having these implemented) in certain areas which are derived from their theoretical/ideological framework and which subsequently turn out to have general effects contrary to their aims. Let me give a few examples.

The traditionalists in Brazil are usually horrified by the inefficiency of government operations, especially the "empreguismo" which one finds. They are usually quite emphatic in recommending drastic cuts in public functionaries as a step towards eliminating government deficits and generally bringing order into government operations. Little do they think of the implications of his policies in terms of overall policies. It is well-known that the Brazilian industrial sector's rate of absorption of labor is just a little more than half the rate of growth of the urban centers. There can be no doubt that a general cleaning operation of the government bureaucracy is going to substantially add to the problem of unemployment or disguised unemployment in the cities, with all the social-political implications of such a phenomenon. However, one hardly ever sees the traditionalist's analysis put into this context, since the solution to this problem is not obvious.

Another example of the traditionalist's distorted view is his absolute faith in policy instruments popular in more developed countries. Heavy stress is usually placed upon the efficacy of monetary policy as a tool of stabilization. The appeal of this instrument is its ease in putting it to work upon short notice and the fact that it is an instrument which controls the economy through the market. It rations credit, but it does not artificially interfere in the allocation of resources. Few of these economists seem to be aware, however, that in a country like Brazil a credit tightening policy could be quite discriminatory against national firms, since foreign firms always have access to their home offices for credit.

The revisionists are not free from the same guilt of making policy recommendations based on partial analysis. Their insistence on maximum price policies for food products the masses consume, while well-intentioned, has the inevitable side-effect of slowing down the rate of growth of food supplies, since a price stimulus is needed to expand food production in a growing economy. (Possibly also a modernization of the food distribution system is needed, not only for general efficiency purposes, but also in order to assure that changes in relative prices are signalled back to the producers. Even socialist economies are nowadays aware that the food problem can never be solved without adequate price and/or income stimuli to the rural sector. The same situation can be found in Brazil's labor stability law, which was a well-intentioned piece of legislation to protect the workers, but which resulted in the unintentioned high labor turnover one finds in many Brazilian firms, with its negative effects on labor productivity.

Another obvious case of complications due to partial analysis is the past stress on import-substitution industrialization at the expense of exports. Only now are the revisionists discovering that in Brazil and other countries the import coefficient hardly fell with import substitution. Only the structure of imports changed, while the structure of exports remained similar to the one at the beginning of the industrialization period. Thus, Brazil and similar countries face a dilema. Should foreign exchange receipts fall again, they will find that there is little room left for import substitution, since the presently imported products (like coal, petroleum, heavy machinery) are often impossible to substitute in the short-run. However, these imports are needed to run the industrial park which was previously built up. Should they be restricted, a severe industrial recession could result. Thus, it is only now that the revisionists are beginning to worry about changing the structure of exports, both the commodity and the geographic structure.

Finally, the revisionists' emphasis on planning has also resulted in partial solutions. Planning has usually been viewed as the construction of a rational five or ten year plan for the economy. A structure for the future economy was imagined, which could be reached by a certain distribution of investments, given certain domestic resources at each relevant period. Although such a plan might be consistent when comparing resources, technology, and goals, the revisionists usually leave out of consideration the facility with which a plan can be implemented. Implementation is either neglected or thought to be outside the range of the economist's work.

NEW FONTIERS

The point which I have been trying to make is that traditional theory is not wrong or irrelevant, but that it is often not wholly sufficient in order to understand the functioning of developing economies and in shaping development policies. The available body of theory is either badly used in the context of developing economies because the assumptions upon which it is based are not appreciated and/or not changed sufficiently to conform to the case at hand, or, though not completely irrelevant, it is inadequate to fully come to grips with the entire range of problems of a developing economy.

Much of economic theory was developed as a concern on how to allocate scarce resources in order to maximize output. Most principles developed along those lines are as valid in the present context of developing countries as they were conceived. Most of the work done on production and capital theory has its uses in developed and underdeveloped countries, whether market economies or centrally directed ones. Even the market structure theories have their relevance. It has long been recognized that the study of perfect competition and its implications for resource allocation and income distribution, although divorced from reality anywhere, supplies the economist with useful efficiency criteria for planning purposes.

The more one thinks about the problem, the more one finds that what is needed is a widening of the scope of economic analysis rather than a rejection of a body of theory. The principal area where developing economies differ from developed ones is the institutional milieu. Thus, it is the behavioristic relationships assumed in developing countries which have to be modified or discarted and replaced by new ones. The consumption, investment and savings functions will probably look differently and possibly the independent variables relevant for analysis will be different than the ones used in developed economies. Policy instruments will have different effects, given institutions with different functions and internal relationships than in the developed economies.

This wider analytical understanding of developing economies can only be attained through a substantial program of empirical work. Presumably substantial insights into the consumer behavior pattern will be gained by the family budget studies which Brazil and a number of other countries are presently coming up with. Government firms operating directly productive enterprises like steel mills, are quite common in Latin America and other developing areas. However, little is known about decision making in such firms — i.e. decisions concerning investments, pricing, labor relations, relations with the main shareholder (the government), etc. Little is even known about private business practices, since very few industry studies have been undertaken in developing countries. Few studies exist on the function and influence of development banks. Since these are important sources of credit to government and private firms, and since often they have controling shares of firms, what is their effect on decision making? How do they cooperate or compete with government planning institutions? Little is also know about why certain policy instruments which are effective in developed countries, are much less so in underdeveloped countries.

Is should be obvious that a study of different behavior patterns of individuals and institutions will force the economists to widen their horizons, to work with sister disciplines which can provide the techniques for understanding the behavior patterns looked for. This might imply partially a return of many economists to institutionalism. However, by the latter I mean not a preoccupation with description of institutions, but rather a study of the behavior patterns of institutions and groups and individuals in so far as they are relevant for economic policy. Only such a search will lead the economic planner to incorporate into his planning side conditions the elusive concept of "capacity to implement a plan."