## RENTS AND A CRITICAL APPRAISAL OF THE PLANN!NG APPROACH IN THE ANALYSIS OF DEVELOPING COUNTRIES

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### INTRODUCTION

This paper has two goals. The first is to show that income growth in income substituting developing countries may be intermixed with rents not known in the literature. The existing literature on rents earned in those countries is concerned with scarcity due to intervention; whereas it will be shown that rents will also be earned in industries which are competitive. If so, it can be shown that if they are added to scarcity rents, total rents may constitute an important proportion of income growth.

The second goal is to follow up the implications of growth based on rents in the planning approach to analyze some developing countries. It will be advanced that macro-models may perform poorly in rent-ridden economies.

In Section II it will be shown how rents in a special sense may emerge in some developing countries. In section III the validity of the planning models in developing countries will be studied. Section IV is an investigation of the operability of the planning approach in an economy growing by rents.

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### THE RELATIONSHIP BETWEEN RENTS AND DEVELOPMENT

Rents are a result of market prices which are over supply price. Expressed otherwise, rents are the receipt of an owner of rescurces in excess of his opportunity cost. The reason why they arise is

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that either supply cannot increase or when it increases, less appropriate resources (i.e., in the sense of less suited for production and/or a less appropriate combination) are used. In the latter case, some resource owners earn rents and the increase of rents coincides with a growth of income

The aim of this section is to show that the mechanism of income growth along with the creation of rents is not perceived clearly in the literature, and once it is, it can be asserted that rents may be a very important source of growth in some developing countries.

It is well known in the literature that rents are very high in import substituting developing countries (1). High rents are attributed to a scarcity of some commodities and resources. Those commodities and resources may be imported and/or domestic ones.

If an import substituting industrialization policy is adopted, industrial activities increase. The foreign recources of the country are limited and the new industrialization requires greater imported inputs. Therefore less consumption goods are imported and even so the remaining foreign resources may not be enough for the input needs of the emerging industries.

The creation of rents for previously imported commodities as a result of a reduction in their quantity is apparent. In addition to that, as more inputs are imported it is probable that their prices increase also, and this is reflected in the prices of goods produced by import substituting countries.

<sup>(1)</sup> A few empirical findings can be mentioned in order to show the importance of rents in some developing countries. Krueger shows that in India rents equalled 7.3 percent of the national income (1964), and that in Turkey rents from import licences were about 15 percent of GNP in 1968 (Krueger 1974 a). After having investigated the magnitude of innefficiency, which is related to protection, in the case of 6 countries, mostly developing ones, Bersman (1974) found that this magnitude was very important in them, and it could go up to 7 percent (Brazil) of the GNP of the country.

Little, Scitovsky and Scott (1970) calculated the effects overprized industrial goods (mostly due to high effective protection) in creating an upward bias in national income (sectoral income) of seven developing countries and found out that this was substantial.

Reynolds shows that the capital share of value added in the protected industrial sector in Latin America, which includes protection rents, averages 40 to 50 percent, compared to 20 to 30 percent in industrial countries (Reynolds 1978).

With the prospering of industry, more domestic resources of a specific nature, such as capital in general, skilled labor, etc are also demanded by newly founded import substituting industries. This means that rents are also created for some domestic resource owners.

It can be shown that there is yet another source of rents which is not perceived in the literature. If it is, it can be shown that rents would emerge not only in goods for which a scarcity is created and/or in newly set up import substituting industries. They will also emerge in the production of goods for which the country has comparative advantages.

The rents in question would arise in the case of inward-looking countries; when several import substituting industries are set up, their respective comparative advantages may be different, some of them may be more and others less efficient. If this policy is continued, it is highly probable that the next industry to be set up will be less efficient than the previous one.

If a large number of commodities rather unsuitable to a country are produced and if for this reason they are very expensive, they cannot be sold in quantities to make their production economically feasible. If the prices of a whole array of newly produced goods cannot be reduced significantly, the prices of other previously existing goods should increase so that a market is created for the former. This would mean that rents are created for the factor owners of previously produced goods. Therefore, if a country starts production in fields where it is comparatively less efficient, rents should be earned in more efficient fields.

The conventional method to measure the effeats of rents and inefficiency introduced by an inward looking industrialization is to reevaluate the products of the industrial sector by international prices. Although this method, to some extent, the overvaluation of the national income due to a propogation of rents and to inefficiency, a more comprehensive measure will be offered below. Before doing that two questions should be answered.

First, how are the sympathetic price rises (rents) generated? Second, how does the new industry remain viable under generalized inflation, with costs soon following prices?

An exact and invariable mechanism supporting and/or making possible sympathetic price rises is difficult to trace here. Actually,

its finding is more of an empirical work (i.e., the observation of how the prices of the efficient industry increased) rather than a theoretical speculation. What we should do here would be to show the theoretical necessity and also the possibility of sympathetic price increases by means of a tentative mechanism.

In order to show the necessity of sympathetic price rises arguments similar to those put forward by economists believing in a balanced growth can be thought of (See, Nurkse 1953). If the products of the inefficient industry are to be bought in sufficient quantities and if they cannot be exported, there are two possibilities: the production in efficient industries should increase and/or their prices should rise. As there are limits, such as scarcity of capital, necessary skill, restraints to productivity increase, etc., the expansion of the efficient industry sufficiently to generate incomes to buy the product of newly set up industries would be difficult. In fact, the production of import substituting industry will be higher than previous imports and they will sell for higher prices. Therefore in order that they may be bought the prices of the efficient industry should rise.

Assumptions about cost conditions in the efficient industry are very important here. The first possibility is that production does not increase in efficient industry at all. If this is the case, the prices will increase at a rate which would create enough income to buy commodities produced by the inefficient industry. Then all price increases would be reflected in rents for factor owners. As factor earning in the inefficient industry are short of rents, equalization of factors earnings would not allow for this to be continuing. But until the new equilibrium is restored, rents would be earned temporarily in the efficient industry.

If we suppose that production in the efficient industry could be increased, then an assumption relating the relationship between costs and returns should be made. If costs remain constant as production increases, rents will not be earned. Rents would be earned only when the cost of production of new producers would be higher than the existing ones.

It seems that the emergence of rents is closely connected with the relationship between comparative advantages and cost conditions. If industries having greater comparative advantages are all constant returns industries, rents do not emerge. This reasoning induces us to investigate the nature of comparative advantages. If factors creating them are connected with the relative abundance of certain factors of production and if the efficiency of newly used ones is inferior to previously used ones, rents would be earned by those factor owners.

There is one more fact. The increase of production would require in all cases the use of capital; as the speed of the increase of capital cannot be speeded and as the increase of production in industries having less comparative advantages of a country is of a nature to require greater capital intensity, the earnings of capital should increase along with inward looking industrialization.

The naivete of the reasoning is apparent here. The argument leads to the conclusion that the increase of capital earnings caused by the production in industries having less comparative advantages is called rents. This may not be wrong in view of the definition that all those earnings over the supply price can be considered as rents.

Now the second problem... How does the new industry remain viable under generalized inflation? Again, this argument is similar to those advanced by Latin American Structuralists. This time another factor is added to those listed by them. In fact, all those countries growing by rents are burdened with inflation which, in some cases, is supressed, to a certain extent by keeping the prices of the agricultural sector low, most of the time by keeping exchange rates low. In other words, the tendency to keep price ratios in the expected direction has always forced inflation in those countries.

As soon as the emergence of rent in competitive industry is captured, the difference between those and Ricardian rent should be shown. Actually, at first sight they may look the same. It is well known that in Ricardo rents are earned by more appropriate factor owners. But when the present case is scrutinized, it will be apparent that the emergence of rents in the Ricardian case was made possible by the production of one commodity, i.e., corn, whereas when several commodities are produced, this possibility vanishes.

When the Ricardian case is extended to several commodities the rents he had in mind would be decreased greatly because inefficiency differences translate themselves to higher prices of several goods which have smaller comparative advantages. Whereas this possibility does not exist in Ricardo: more production translates itself to higher rents. It is not supposed that a multiplication of

commodities would annihilate all rents; they do exist. But when this happens the amount of Ricardian rents decreases but the kind of rents expounded here emerges.

Once the creation or the origin of rents is detected, its repercussion on the other sectors of the economy should be sought. In other words, so far the first round is covered up; now we come to the second round.

In fact the above statement takes us up back to physiocratic thoughts and/or to the classical (Smith, Ricardo) approach to the working of the economy. They were interested in the origin of wealth (read, national income) and once it was created its spending would give rise to further income. The reasoning here is similar to it. However, physiocrats believed that the origin of wealth was agriculture and once it is earned, it would give rise to employment in the industrial and service sectors of the economy. Whereas according to my argument the origin of income is shifted to the industrial sector. There are several reasons for this shift. The dynamics of income creation seem to have turned to industry in our times. This is because of the difficulty of increasing agricultural production and Engel Law, i.e., when the country enriches, the proportion of spending on agricultural goods decreases. Therefore it is natural that (when international trade and tourism are put in their proper place) the origin of development shifts to industry.

Actually, the work the physiocrats and/or classical economists relating to development is forgotten and all factors connected with development are scrutinized and they are put together without giving primacy to any of them. What I do is to turn back to the classical reasoning.

Once the origin of development is detected, it would not be difficult to follow up its repercussion on the other sectors of the economy. When inefficient industry flourishes and when rents are earned in the efficient industry, a small proportion of earnings will be spent on agriculture and the rest on industry and mostly on services. This would mean that the service sector will expand along with creation of rents.

The expansion of the service sector consists of both the increase and the volume of services and their prices. In fact, as more income is earned because of rents in the efficient industries all earnings should be affected by it, earnings in the service sector being be one of them. (Let me remind at this stage that as a result of what is called dualism between agricultural and nonagricultural sectors, rents are not shared by the agricultural sector.)

A striking characteristic of developing countries would facilitate the emergence of rents: this is the dualistic character of some developing countries (Lewis 1954), one agricultural sector along with a nonagricultural one. Even if the theoretical scheme put forward by Lewis and developed by others (Jorgenson 1962, Fei-Ranis 1962, Harris - Todaro 1970) is not accepted totally, at least two observed facts can be drawn upon to show that two sectors of the economy can be distinguished quite distinctly. One is the tendency relating to an ever increasing share of the nonagricultural sector in the national income along with the process of development (while that of agriculture shrinks), the other is the earning difference between those two sectors.

The statistics show that the earning difference between those two sectors is around 2 times (i.e., the earnings in the nonagricultural) in the early years of development. It goes up to 2.5 when the country reaches the stage of a middle income country, and then it begins to decrease as the country develops. In highly developed countries the ratio is nearly one (Kuznets 1966, Chenery 1975, 1979).

Although this is a general tendency there are wide variations around it, especially in middle income countries, i.e., while the expected figure is 2.5, there are several countries where it may be much higher than that, such as the case is in Turkey, over 5.

As nonagricultural sectors are delimited and insulated from the agricultural sector of the economy, rents may emerge and be sustained in the nonagricultural sector. First of all, rents are not shared by the agricultural sector where a great proportion of the population lives. Secondly, a great proportion of exports originates from agriculture in those countries; therefore there is not much room for rents in agriculture as rents cannot be exported. Thirdly, there is a relationship between import substitution and rents and as import substitution occurs in the nonagricultural sector, it is probable that rents should exist in the nonagricultural sector.

It can be shown that the earning difference between the two sectors of an economy can be a better measure of rents compared with alternative ones. First of all, parts of rents are created in the service sector. As the income of the industrial sector increases along with rents the demand for the service sector will be higher than if there had not been rents. This will create a greater demand for the service sector; this greater demand in its turn will give rise to rents in that sectors. Therefore a mere re-evaluation of products by international prices in the industrial sector does not take care of all rents in the economy. On the other hand, the prices of products in the service sector evaluated by international prices does not mean much as most of them are home goods, the price of which is clearly related to the conditions in the domestic economy. (See Balassa 1964; Kravis et al 1975 and Kravis et al 1978).

Another measure of evaluating rents is to use sectoral effective rates of protection. This method would not be of any use as a great proportion of rents are not earned in the protected industries; they are earned in efficient industries which are not protected.

Therefore earning differences should be a better measue of rents.

Once rents are created, their sharing depends on the bargaining power of various income earners, as well as on economic organization. As there is not a strong relationship between supply and price, the exact proportion of the product to be appropriated either by labor and/or capital cannot be determined by their marginal productivity. Actually the presence of high rents distorts the meaning of the marginal productivity of a factor.

The level of rents may therefore be measured with the earning differences between earnings in the agricultural and nonagricultural sectors. Again the transformation of the industrial structure, i.e., the increase of the share of the nonagricultural sector and the decrease of that of agriculture, would allow for ever increasing rents.

The whole reasoning leads to an analysis of what is called patterns of development. In recent years, some economists (See, especially Chenery and Syrquin, 1975, and Chenery, 1979) tried to study both the initiation and the process of development under several categories such as 1) Primary specialization, 2) balanced growth, 3) import substitution, 4) industrial specialization.

The aim of the above classification is similar to a certain extent to the classical approach in the sense that the source and propagation of development is attached to one of the patterns. Although in the classical case the origin was agriculture, according to Chenery 4 different patterns could be distinguished.

At first sight, the present approach, i.e., development by rents, may seem to be a different name given to development based on the import substitution; and again the existence of rents in import substitution is well known in the literature. But it is apparent that my approach goes deeper than it. First of all, the origin and propagation of rents explained in my approach is different from the existing literature: among other things rents are created in efficient industries rather than inefficient one. Secondly a measure of rents, i.e., earning differences between nonagricultural and agricultural earnings, is suggested and its implications are followed up. On top of all those, the impacts of rent based development are drawn out.

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# A SUGGESTION FOR THE ANALYSIS OF THE FUTURE OF AN ECONOMY

Once it is concluded that the creation of rents in the development of an economy is important, both the analysis of the past performance of an economy and its future should be different from the traditional one.

In the modern literature the future of an economy is analyzed by what is called planning approach. It consists of several equations and their simultaneous solution. Several strategic macro-magnitudes of an economy are brought together in different equations. Different macro-magnitudes are taken as variables and they are related to each other by parameters. Parameters are found by means of econometric methods based on the past observations relating to the economy. Although parameters are adjusted in some cases, there is a tendency to keep them constant most of the time. The most important parameters relate to the relationship between inputs and outputs. More specifically, capital coefficients, (capital/ output ratios), labor coefficients (labor/output ratios), input-output ratios (an input-output matrix calculated according to the number of sectors), parameters showing productivity increase of several factors, etc. Once there is a tendency to keep those parameters constant, the substitution among several inputs would be impossible.

The upshot of the present analysis is this: once it is concluded that rents dominate the national income, the past relationship bet-

ween input and output cannot be projected into the future. This is not only because of the variability of parameters as a result of sudden changes in rents, it can also be shown that the existence of rents would create difficulties relating to trade, price levels employment, distribution, etc. If efforts are directed to overcome those difficulties, the decrease of rents is a necessity. On the other hand, if rents decrease all those previous parameters would be made irrelevant right at the beginning.

Before presenting the reasons supporting the argument above (which will be attempted in Section IV), it may be useful to mention some reasons found in the conventional literature showing the inadequacy of the modern planning approach in developing countries.

As is summarized above, the idea behind macro-modeling is based on two assumptions. The first is the stylized behavior of economic agents and the existence of institutions supporting it. It is doubtful whether those assumptions can be made in a developing country. The second assumption relates to a constancy of static relationship between inputs and outputs.

Some economists expressed their doubts as to the adequacy of assumptions lying under the functions constituting integral parts of macro-models in developing countries; they are: (a) producers act under the profit maximization motive; (b) the allocation of resources among firms and industries is affected according to their relative profitability, i.e., factors of production are sensitive to price incentives.

Again, some economists show that the static relationship between inputs and outputs in the production function method does not hold in developing countries, due to the dynamic and institutional changes which have been occurring in them. Moreover, it is shown that the assumption as to the constancy of factor shares disguises the most important factors causing development (Streeten 1972, pp. 140-146).

Another factor making the use of macro models difficult to apply in developing countries is the existence of dualism in them. In fact, in most macro models applied to developing countries the dualism assumption is inserted into it. It is well known that in the dualistic model, first formulated by Lewis (1954) labor in the nonagricultural sector receives an income which is determined by agricultural wages, which is determined by average productivity. The

rest is called surplus and is appropriated by capitalists. In this scheme, wages in the agricultural and nonagricultural sectors will not be equal to each other. Therefore the marginal productivity rule which constitutes the foundation of macro-models cannot be inserted in a macro model. But it is demonstrated later (Fai-Ranis, 1962; Jorgenson 1962; Harris - Todaro 1970) that the dualistic approach and the use of the rule of marginal productivity could be reconciled with each other.

Those facts are well known in the literature; still most economists use macro-models. They do not look strongly enough to reject the whole method. But when there are rents, some of the most important operational concepts of macro-modeling lose much of their usefulness. This will be shown in the next section.

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# FOUR OPERATIONAL CONCEPTS RELATING TO MACRO MODELS RECONSIDERED

Once a macro model is constructed there are some concepts which make it operational in the sense that if they are used in analyzing the source of growth of an economy and/or in predicting its future, several concepts are freely used. They are: (a) the capital/output ratio; (b) the elasticity of substitution of several factors; (c) the equality of marginal productivity between agriculture and nonagricultural sectors; and, (d) the selection of endogenous and exogeneous variables.

It will be shown below that when high rents are created along with development, those concepts lose much of their operational values.

### The capital/output ratio and macro models

We know that in order to make macro-models operational capital/output ratio is supposed to be constant (Zerembka 1972, p. 44; Taylor, 1979 p. 145-146),

Once a constant capital/output ratio is accepted, those models would easily be made operational in the sense that if the investment is determined, the income increase would flow from it.

Could this assumption be adhered to in an economy growing by rent? It is shown above that the growth of the economy may be closely related to the existence of rents, i.e., the economy grows along with and proportionately to rents. The relationship between capital growth and in the period before and after the switching, and if output is more under the influence of the international prices after it, it is probable that capital/output ratio will increase.

Does this analysis suggest that the welfare of the community (measured by the amount of goods consumed) would decrease as a result of an increasing capital/output ratio measured in terms of international goods? In other words, are we confronted with a question of welfare or measurement? We believe that both are intermixed in the sense that if price ratios change, the same basket of goods may mean a different welfare for the community. On top of that, if the value added by the industrial sector diminishes in terms of international goods, the demand for the service sector may also decrease, and this would create a downward influence on incomes.

The meaning of this complicated statement should be clarified. Research by Kravis and associates (Kravis et al 1975, Kravis et al, 1978) showed that the prices of nontradable goods increase along with development relatively to traded goods. A great proportion of these goods are produced in the service sector. Therefore the increase of production (which may be called development) along with import substituting industrialization would require that the demand for this sector would increase, which would translate partly to the increase of the volume and partly to price increases. Now if income shrinks in terms of international prices, a reduction should be expected in the service sector and this would mean an increase in the overall capital/output ratio relating to the whole economy.

The assumption as to the constancy of factor shares is an integral part of most macro-models (See the macro model by Taylor, 1979 pp. 145-149). The constancy assumption which is based on the unit elasticity of substitution is used to disaggregate the effects of input and non-input factors in development. This method is most successfully used by Denison (1968, 1974, 1979) to disaggregate the source of growth in the American economy. It is well known that this assumption depends, along with others, on the rule of marginal productivity. Whereas as was shown throughout

this article, in an economy tuil of rents the relationship between marginal productivity of factors and their share is very loose

There is another dimension of the substitution. If the substitution is looked into from the point of view, of individual firm, most of the assumptions of the macro-planning can be applied. But the general level of employment (or unemployment) should be kept in mind when assumptions are made on the substitution of factors. This belief is based on the importance of employment in some developing countries. Substitution of labor should be sought at any rate even if decrease of income is produced.

In most analyses a relationship between real wage level and employment is supposed to exist: in equations showing labor demand, the wage level is compared with the marginal productivity of labor. The previous analysis suggests that when there are high rents, productivity as an aggregate concept relating to the whole of an economy does not mean much. Actually, a causality rather than a mutual determination of employment between wage level and productivity of labor can be found. The level of productivity overshadowed by rents seems to be determining wage level, which in turn, determines the level of employment. Whereas in the conventional literature the emphasis is put on the role of trade unions supported by the favorable interventions of governments in pushing up wage rates. This, together with the low cost of capital is supposed to increase capital intensity.

According to the present analysis the emphasis should be laid upon rents, along with other aspects of the problems.

### The Distribution of labor between agricultural and nanagricultural sectors

Now I will question the validity of assumptions as to the distribution of labor between agricultural and nonagricultural sectors and its relationship to wages in both sectors. We know that in the duality theory, nonagricultural wages depend on the agricultural wages, and they are a multiple of agricultural wages. In other words, they are determined by agricultural wages rather then by the marginal productivity of labor. But in conventional economic analysis this deficiency in neo-classical analysis is remedied by certain economists (see, for instance, Harris-Todaro 1970).

The difficulty in the neo-classical theory was this: if in both the agricultural and nonagricultural sectors wages are determined by marginal productivity, they must be equal to each other in order to close the model. Nonagricultural wages will, of course, be higher than those in agriculture because of net adventages, i.e., higher prices in towns, transportation cost to towns, the nature of the work, etc. This difference is compatible with the theory. But there was something which was not compatible with the theory: The ever existing unemployment in urban sectors; theoretically, this was not possible. In fact, competition would equalize rural and urban wages (net advantages taken into consideration), and at the end of a decrease in urban wages no unemployment would exist in urban areas.

In order to explain this inconsistency, Harris-Todaro (1970) proposed a model.

The meaning of this model is this: The high nonagricultural wages attract laborers to nonagricultural sectors. They may be sure that they will be unemployed in nonagricultural sectors. But sometime in the future they will find employment in urban sectors and their wages will be higher than agricultural wages. This will compensate for the lack of income during the unemployment period in nonagricultural sectors. This will also determine the amount of migration from agriculture to nonagricultural sectors in the sense that expected and actual wages will be equalized: all this means that while the marginal productivity rule holds, the possibility of unemployment is accepted. In other words, the exogenous determination of wages in nonagriculture sectors does not harm the model according to that explanation. I think it does. Once it is accepted that the proportion of rents is high in the source of growth, the possibility of distruption of urban wages from its marainal productivity becomes higher. And this is taken care of in theory by adjusting the amount of unemployment in urban sectors. If this kind of determination of wages had not created any problem in the smooth working of an economy, this would have been cossible. Whereas it can be shown that this is not the case. Again, if there had not been much room in pushing up the level of wages, this would not harm the theory. But we know that this is not the case.

If the earning differences between the agricultural and nonagricultural sectors of the economy were not very large, this might have been compatible with the theory of marginal productivity; but the existence of a high rate of unemployment as a result of great earning differences would create such a great social cost for the economy that, it would not be possible for the economy to operate smoothly. Let us suppose that the earning ratio is 5 instead of 2 or 3, which is expected. According to the Harris-Todaro theory this would give rise to such an unemployment in the urban sector that the infrastructure need (i.e., schools, roads, transportation, sewage, hospitals, etc.) would be beyond the means of the economy. This would imply that there is another dimension in the Harris-Todaro reasoning which is neglected by those authors. If, on the other hand, this is included in the theory, the rule of marginal productivity would not be enough to close the model.

### The selection of endogenous and exogenous variables

It is well known that in macro models based on neo-classical reasoning there are rigid restrictions on the selection of exogenous and endogenous variables (Taylor 1979, p. 236). But when there are high rents the neo-classical procedure cannot be followed. Let us take such variables as exports, exchange rates, and profit rates and employment. In the literature exports and exchange rates are taken as exogenous and profit rates and employment are taken as endogenous variables. But it can be shown that for countries growing by rents this procedure should be reversed.

In most macro models constituting the basis of a planning approach exports are taken as an exogenous variable. The growth potential of exports is estimated and several growth possibilities are considered.

As the impact of exports on the efficiency of the economy has a determining role in the functioning of an economy, the role of exports is crucial. Therefore, the accepted level of exports would have important implications.

In the conventional treatment, factors determining exports are related to the nature of export goods and the demand elasticity of these goods, while their share in the regional and world trade is taken as a reference point. Within this general framework the price of the existing and potential export goods is considered as a most strategic variable influencing the export performance.

This approach depends on two assumptions. It is firstly assumed that the efficiency of producing every goods is not the same:

the country may be relatively more efficient in producing some goods while being inefficient in producing others. Prospective export goods are those in the production of which the country is more efficient: This is nothing more than the old comparative cost theory. Therefore if adequate resources are diverted to those fields, there is no reason why the country should not increase its exports.

The second assumption relates to the exchange rate. It is assumed that as prices are expressed in international currencies, the adoption of a proper rate of exchange may promote exports in line with the comparative advantages of the country.

Actually the validity of both assumptions is dubious.

Regarding the first assumption, serious doubts can be expressed. When there are high rents, the price of almost all existing and potential goods may be very high to allow for exports. Rents cannot be exported. It is impossible to separate the relative prices from absolute prices. In other words, goods produced in the country may be classified according to their relative comparative advantages; but their absolute prices may be very high. Now this will lead us to the rejection of the second assumption: The efficiency of the exchange rate in decreasing the exports prices for foreign purchasers. In other words, by fixing a sufficiently high exchange rate the products of relatively efficient industries may be exported.

All this would mean that if there is a close relationship between exchange rates and exports, and if the volume of exports can be determined exogenously by studying the export possibilities and potentials of an economy, exchange rates would be determined exogenously. However, this statement does not seem to be a fair representation of the literature.

The relationship between exports and national income is known in the literature. The favorable effects of greater exports are generally compared with three depressing effects of a devaluation attempted in order to increase exports. Three depressing effects are related to (1) a worsenning terms of trade, (2) an imperfect substitution between domestic and imported inputs and (3) deflationary conditions which may come about right after it.

Moreover, in some cases, exchange rates are sought within a general equilibrium analysis which is intended to show the

equilibrium exchange rate which would clear markets. Therefore it can be concluded that exchange rates are determined endogenously.

Several objections can be raised to the procedure followed in the literature. First of all, a study of export potentials without any regard to the depressing effects of higher exports on the economy is not feasible in view of much closer relationship between exports and national income in economies which have grown by rents. In other words the relationship between exports and the national economy should be taken as a constraining condition in the analysis of exports. This would mean that exports cannot be determined exogenously.

Secondly as was shown above, in a rent ridden economy parameters cannot be kept constant. Therefore, the general equilibrium analysis intended to determine exchange rates cannot be applied in those economies. Moreover, as soon as exports are determined exogenously the determination of exchange rates endogenously is nothing more than seeking those rates which would be feasible endogenously within exogenous constraints.

The crux of the problem is to show that the relationship between exports and national income is much stronger in rent ridden economies compared with those where there are not rents. The latter case constitutes a reference point for the analysis in the existing literature.

The argument here relating to the relationship between rents and the national income is parallel to that one advanced in the case of capital/output ratios. In addition to three factors well known in the literature, the existence of rents would introduce another dimension when the relationship exports would give rise to a smaller income in terms of international goods.

This has a very important implication in the determination of exports and exchange rates in the sense that both should be sought endogenously. Exports must be a function of the national income expressed in terms of international goods. This would mean that rents should be decreased. The upshot of the above analysis is that as long as there are high rents, exports cannot be increased. The only possibility to increase exports is to reduce them. The reduction can be achieved by a decrease of earning differences between nonagricultural and agricultural sectors. It is shown above that this difference is a measure of rents. The logical conclusion of this reasoning is that exports should be found enclogenously by correlating them with the earning differences bet-

ween the two sectors of the economy. If so both exports and exchange rates should be related to the national income and be taken endogenously.

The argument that exchange rates should be taken as endogenous in planning exercises could easily go the other way. The above argument suggests that a strategy of constraining the value of exchange rate in planning exercises then letting it be determined endogenously. But this does not mean that the conventional approach in fixing exports exogenously is still true. It is asserted here that the effects of larger exports on the national economy should be determined endogenously before fixing a level of exports which are compatible with exogenous constraints.

In these models the level of the earnings of capital depends on the marginal productivity of capital and it is determined endogenously. Whereas, as is shown throughout this paper a proportion of the earnings of capital is rents. In conventional models it is supposed that the economy can operate with any level of profit which is determined endegenously in the model. If part of the profit is rent and if rents are above a certain level, this can create distortions in the economy, and it is impossible to use those models in the prediction of the future of the economy.

Distortions in questions are smaller exports, higher unemployment, continuing inflations and an unequal distribution. It is asserted that if profit rates are determined endogenously, we will be faced with problems as a result of rents. Therefore normal levels of profits rates, which should be determined exogenously, should be a constraint in the macro-models.

The same is true of employment. It is shown above that the level of unemployment should be taken as a constraint in the models and its determination within the system should be abandoned.

After having shown the inadequacy of all those operational concepts of a macro model it is very difficult to use neo-classical types of macro models in the analysis of a developing country. This does not mean that they are useless; it is adduced that they will either be modified along the lines suggested by the existence of high rents or a new approach should be developed to study those economies (see, for example, Hatiboğlu 1978, and 1983).

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