Monetary and Economic Problems of Small Island Economies: The Caribbean Case

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The following propositions are the outcome of the empirical study of the main features of the economic development of several Caribbean Islands, namely: Barbados, Guadeloupe, Jamaïca, Martinique, Puerto-Rico and Trinidad, during the last 25 years.

These are small insular economies characterized by:

- Individual populations under 3 million inhabitants in the 70's and surfaces all smaller than 15,000sq km.
- Economic structures highly specialized in the export of one or two commodities, which generally represent more than 50 % of the value of exports¹: sugar and bananas in the French islands, bauxite and oil in Jamaïca and Trinidad, products of light industry in Puerto-Rico, tourism in Barbados.
- These exports take place within the frame of preferential agreements, profiting by quotas on metropolitan markets or by large foreign firms.
- A very restricted sector producing for the domestic market, and consequently high import and export coefficients (import coefficient ≥ 50 %, export coefficient between 15 % and 50 %).

Martinique and Guadeloupe are French overseas departments and thus assimilated with the french economy. Puerto Rico is a "Free associated State" partly governed by US laws and institutions. Barbados, Jamaïca and Trinidad are independant.

Despite those differences, all of the islands had, in the period 1950 - 1975, a fast economic growth, the average yearly rate of growth

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¹ All statistical data from our thesis: "Island Economy and Foreign Oriente Development" (Economie insulaire et développement excentré, 1977).

reaching $10 \sqrt[9]{0}$ in nominal terms, and $4 \sqrt[9]{0}$ to $5 \sqrt[9]{0}$ in real terms. Besides, they have two common problems:

- their rate of unemployment has remained, throughout the period, over 10 $^{0}/_{0},$
- their balance of trade shows a chronic deficit. The ratios of imports to exports reached between $70 \, ^{0}/_{0}$ (Trinidad) and $25 \, ^{0}/_{0}$ (Martinique) in the early 70's.

These are the main problems that insular authorities have been facing for many years.²

The remedies generally proposed for these two problems by current economic theory can be roughly classified into two main types of economic policies:

- those that privilege the "real" instruments,
- those that prefer to resort to monetary instruments.

At the level of diagnosis, these two streams of thought rejoin. Unemployment is mainly due to insufficient capital and the domestic investment rate. The balance of trade deficit is a result of insufficient growth and the competitiveness of exports. But the proposed economic policies are divergent: For the first school of thought, the rise in the foreign investment rate is bound to increase employment and develop exports. For the second one, the manipulations of money supply and of the exchange rate should lead to the same results.

Our papers consists of four sections:

1. The "real" policies based solely on the raising of the investment rate (domestic or foreign) do not guarantee the supression of unemployment in insular economies. In fact, the rise of the investment rate can go on a par with the persistence, even with the increase of unemployment and of the balance of trade deficit.

2. Considered separately, monetary policies (whenever possible within the institutional frame) cannot correct the unbalances we are dealing with. It is even possible that the real structures hinder them, make them inoperative or harmful.

3. The reason for these inefficiencies lies in that these policies are based on theoretical conceptions that certainly account for the functioning and development of big industrial economies, but do not necessarily shed any light on the mechanisms and structures responsible for

 $^{^{\}rm 2}$ In the French islands, the balance of trade deficit is not considered as a problem.

the unbalances in insular economies, underdeveloped and open. A policy intended to solve these problems should begin with a specific interpretation of their causes, within the frame of the economies in question. We shall give a brief outline of such an interpretation.

4. The main points of an economic policy are outlined.

I. Rise of the investment rate, unemployment and external unbalance in an insular economy

To support our first proposition, we have plenty of empirical data at hand. Since the 50's the principal orientation of economic policies implemented in most of the islands has been to attract foreign capital and raise the public investment rate.³ The instruments of this policy have been to grant fiscal reductions to foreign capital and build infrastructures that would allow a rise in productivity. As a result of these policies, all the islands have had a most remarkable rise in their gross investment rate in the last 25 years. The ratio of gross capital formation to gross domestic product has gone up from $10 - 15 \, ^{0}/_{0}$ in the 50's to $25 - 30 \, ^{0}/_{0}$ in the 70's, whereas the part of external investment (public and private) in total investment reached $50 \, ^{0}/_{0}$ or more.

Yet, at the same time, the rate of unemployment remained at the same level everywhere and durably at $10 \,^{\circ}/_{\circ}$ or more. A few examples: In Puerto-Rico it has gone from $12,9 \,^{\circ}/_{\circ}$ in 1950 to $10,8 \,^{\circ}/_{\circ}$ in 1970 and $19,1 \,^{\circ}/_{\circ}$ in 1975. In Martinique it went up from $11,6 \,^{\circ}/_{\circ}$ in 1955 to $21,5 \,^{\circ}/_{\circ}$ in 1967 and $26,3 \,^{\circ}/_{\circ}$ in 1972. In Jamaïca, it went from $17 \,^{\circ}/_{\circ}$ in 1955 to $13,4 \,^{\circ}/_{\circ}$ in 1960 and $20,5 \,^{\circ}/_{\circ}$ in 1974.

Therefore, the rise of the investment rate has not reduced the rate of unemployment. Numerous examples like these exist for other periods and other islands.

As for the balance of trade deficit, it also appears that the increase of the gross investment rate went on a par with its appearance and its persistence (or its increase). In all the islands, the trade deficit appeared in the years 1940-1950. In the subsequent period, it increases slowly in Jamaïca, Puerto-Rico and Trinidad, the ratio of imports to exports decreases in these islands, going down from $85 \, ^{0}/_{0}$ to $65 \, ^{0}/_{0}$ in the early 70's. In the French islands and Barbados, it increases much more rapidly, the ratio going down from $70 \, ^{0}/_{0} - 80 \, ^{0}/_{0}$ in the 50's to $25 \, ^{0}/_{0} - 30 \, ^{0}/_{0}$ in the 70's.

Therefore, the increase in the investment rate has gone on a par with the persistence (and even the increase) of unemployment and balance of trade deficit.

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³ Cf. Le Plan des DOM 1966 - 70, Lewis (1950) and Echenique (1963).

II. Monetary policies and insular economies

In fact, there are two possibilities offered by a monetary policy: — One of them consists in increasing the money supply to lower the interest rate and facilitate the financing of investment. It is based on the concept of the credit multiplier

$$\Delta G = \frac{\Delta S}{r} \quad \text{with} \quad 0 < r < 1$$

where ΔG is the creation of money

- r the rate of bank reserves
- $\varDelta S$ the increase in reserves

We know that to be complete, this multiplier must take capital flows into account: towards the non banking system (C) and towards the outside (d).

The multiplier then becomes:

$$\Delta G = \frac{\Delta S}{r + (C+d)(1-r)} \quad \text{with} \quad 0 < C < 1$$

But several factors tend to reduce the significance of this concept in insular economies (*Thomas* 1972). On the one hand, there is no fixed reserve ratio for commercial banks in the english speaking islands. On the other hand, in very small economies, very open, C and d are very high and very variable.

Besides, empirical data show that, in practice, commercial banks have a strong preference for short term financing of the purchase of consumer goods and imported goods and are loath to commit themselves to long term new activities of production.

Finally, the rate of exchange being fixed and the "real" and monetary relations with the outside overwhelming, the creation of money tends to have immediate repercussions on the balance of payments and make its difficulties worse.

 \rightarrow The second type of monetary policy has as its goal to work directly on the level of the balance of payments. Considering that external unbalance and unemployment are the result of insufficient competitiveness, expansion of exports and/or production for the domestic market, it proposes devaluation as a quick way to lower export prices and raise import prices (in domestic currency) (cf. Lewis 1972).

If we suppose that the economy has the adequate import (n_m) and export (n_x) demand elasticities i. e. $n_m \ge 1$, $n_x > 0$ and $e_m = 0$, one can

expect an expansion of exports that would set straight the balance of trade and absorb unemployment.

But, because we are concerned with small economies, strongly export-biased and with limited resources, even though in the very short term the elasticities are adequate, one must suppose that in the middle term, rigidities come up at the level of the domestic supply of consumer goods and bring about a rise in their prices. The workers will react to the relative deterioration of their purchasing power by intensifying their industrial demands and the satisfaction of these demands will induce a rise in nominal wages and everything else being equal, drop in the competitiveness of exports. So that once the principle of the change of the exchange rate is accepted, it is not a devaluation, but an exchange rate policy that must be envisaged. Then, there is a choice between two main options:

- an (active) policy of exchange control;

- a (neutral) policy of flexible exchange rates.

But whatever option is chosen, the variations of the exchange rate will bring speculation on the currency (and consequently harmful effects for the balance of trade and the investment rate), as long as the exchange rate is not optimum (See *Taylor* 1974).

Concerning the alternative consequences of these various monetary policies in the islands, empirical datas are non-existent. For, although for over ten years the authorities in the independent islands have had the legal possibility of implementing active monetary policies, in practice they have always followed passive policies, keeping a fixed exchange rate and the convertibility of currency into the dominant currency⁴ (i. e. the pound Sterling) (*Thomas* 1972).

In fact, at several levels, factors appear that severely restrict the possibilities of an active monetary policy in the islands:

- On the level of economic structures, the heavy specialization in a few primary products sold on export markets and the high import coefficient;
- On the institutional level, the strong hold of foreign enterprise and capital on insular resources and the predominance of foreign or metropolitan financial intermediaries;
- On the functional level, the recourse to a development policy based on the attraction of foreign capital and on the access to metropolitan preferential markets, namely a foreign oriented development policy.

⁴ Jamaïca has started recently a policy of exchange control.

In these circumstances, insular authorities have scrupulously abstained from resorting to the manipulation of the monetary policy instruments. Yet the "out-centered" development policies have allowed a very fast growth of the income per-capita in the last twenty-five years. And if we admit that the yardstick of development is the rise of this indication, one might conclude that the foregoing attitude has been efficient.

But, if we recognize that development does not identify itself with the growth of the income per capita, but supposes a change in the structures and the eliminaiton of the unbalances of underdevelopment, we cannot remain satisfied with the achievements. For the very mode of growth is involved which is responible for a causal relationship between the balance of trade deficit and unemployment.

III. Specific interpretation of foreign oriented development in an insular economy

In order to understand the mechanisms linking the process of foreign oriented growth to the external unbalances and to unemployment in insular economies, we have to take a long term view of the economic evolution of the islands.

In the 40's and 50's, the traditional economy of the islands consisted on one side of a dominant plantation sector, producing one or two export products, characterized by a comparatively low productivity and relatively low wages, a strong hold of external capital⁵ and a very large recourse to imports.

On the other side, an embryonic domestic sector (domestic agriculture, handicrafts, and industry) in which productivity and the level of wages are hardly higher than those of the plantation sector. For the insular economy as a whole, productivity and the average rate of wages as well as the consumption level are lower than in metropolitan economies⁶.

The development policy in use consisted of increasing external (public and private) investment, that is to say to juxtapose to the traditional economy a new sector comprising commercial, industrial mining and financial activities, a sector characterized by a level of productivity and a technology very close to the level obtained in industrial "metropoles" (in the same sectors), and a process of production and financing vertically integrated into the metropolitan economies.

⁵ Except in Martinique and Barbados.

⁶ On this interpretation cf. Best and Levitt (1969) and Best (1972).

The implantation of this sector, that we call the New Vertical System (NSV)⁷ has several consequences on traditional insular economy:

1. From its creation, it has determined a considerable increase in productivity because of the labour that it absorbs. The rate of wages being temporarily at the level previously determined in the traditional sector, a comparative advantage is created in favour of the islands, in comparison with the conditions of production obtained in the industrial metropolis. We have:

$$\frac{\gamma_d}{\gamma_x} > \frac{W_d}{W_x}$$

with γ standing for productivity,

W the rate of wages,

d and x representing the island and the outside world respectively.

The rate of profit being high, the NSV tends to widen very rapidly.

2. The integration of insular labour in the NSV has two other consequences in the middle term:

- on the one hand, the conditions of organization of the said labour improve rapidly (by way of concentration and urbanization);
- on the other hand, the publicity and credit distributed by the NSV tend to exaggerate the population's propensity to consume (the average propensity to consume has been greater than 1 in Puerto-Rico since the 1950's and in Jamaïca since 1970's) and to direct tastes towards the products of the NSV, i. e. imported products or import substitution products manufactured from imported intermediate goods. The material aspirations of labour increase, industrial demands get more intense, the result in the medium term being the increase of the nominal rate of wages to a higher rhythm than that of the metropolitan nominal rate of wages (in the same sector). This is made possible by the great differences existing from the start between wages and productivity in the NSV and by the alignment of insular wage demands on those of the metropolitan trade unions.

Wage increases cause the rise of import demand (or the rise in the demand for the products offered by the NSV, which is the same thing). But the increase in the imported part of consumption and insular inputs integrates more and more largely the influence of external inflation and of the charges weighing on import prices (transport, freight, commercial margins, etc...) in the determination of the level of domestic prices.

⁷ New dynamic sector in the terminology of Best and Levitt (1969).

This tends to cut real wages and urges the wage earners to strengthen their fight in the view of the increase of nominal wages. Thus a cumulative circle is created, in which the increase of nominal wages facilitates the increase of the part of imported consumption and where the effect of the latter on the real wages leads to the intensification of wage demands and to the increase of nominal wages. The increase of the rate of nominal wages tends to lower profitability in the activities of the NSV. To avoid this reduction, productivity has to rise at the same rhythm with the rate of nominal wages.

But, as productivity in the NSV is close to the metropolitan level, its rate of growth is limited by that of metropolitan productivity. In so far as, in the metropolis, the average wage rises almost at the same rhythm as productivity, in the islands, the rate of nominal wages will rise more rapidly than productivity, i. e.:

$$\frac{\Delta \mathbf{W}_d}{\mathbf{W}_d} > \frac{\Delta \gamma_d}{\gamma_x} \ge \frac{\Delta \gamma_x}{\gamma_d}$$

Thus appears a tendency of a decline in competitiveness or, if one prefers, of the comparative advantage of the islands.

But in so far as other accessible territories exist where the rates of nominal wages are lower than in the islands, capital will move out to these territories. Thus, new competitors appear, whose effect is to compress export prices for insular products on metropolitan markets. In these conditions the deterioration of the competitive position of the islands can only be slowed down by capital intensification, the rationalisation of costs and the replacement of labour-intensive activities by more capital-intensive activities. All of this means the reduction of the rate of absorption of labour in the NSV⁸.

In the long term, as we are dealing with very small economies, the increase of nominal wages in the NSV attracts labour from the traditional sectors, whereas the rise in domestic prices tends to depress its real income and brings it to increase its "reserve price".

In the plantation sector, the entreprises cannot reflect the cost increases in export prices (because it is an agricultural activity, competition is strong). They have to rationalize costs or disappear.

In the domestic sector, entreprises whose productivity and financial capacity are already weak, have to face at the same time the increase in costs and the competition from imports. They also have to rationalize

⁸ For a study of this phenomenon in the short term, see: *Gutierrez* (1971), *Herrero* and *Castaneda* (1971).

their costs or disappear. Given their original debility, most often the second solution is the one to prevail.

3. Thus, on the one hand, the rise of wage costs limits the creation of jobs in the NSV, reduces competitiveness in the traditional sectors. These movements are accounted for by the increase of the unemployment rate. On the other hand, the reduction of insular competitiveness accentuates the tendency to a balance of trade deficit, which indeed is inherent to the mode of foreign oriented development to the extent to which the latter implies an increasing net inflow of capital. In fact, the balance of trade deficit expresses the adjustment of the balance of goods to that of capital.

IV. Suggestions for an economic policy

The measures to be taken in the first phase should have as aims:

- to adapt latter technology to the endowment in local factors and resources;
- -- to direct consumption more towards domestic products and develop simultaneously domestic production of consumer goods;
- to reduce the propensity to consume;
- to reinforce the participation of domestic capital in the development process in order to reduce the recourse to external and the outflow of capital that it implies;
- to reduce the rhythm of increase in the rate of nominal wages to that of productivity.

This does not necessarily mean the reduction of the growth rate of real wages. All depends on the rhythm of increase in the prices of consumer goods. If, in the short term, a wider recourse to the consumption of local products is likely to raise their prices, in the long term, the development of domestic production could allow a slowing down of the rhythm of this increase.

It is obvious that these policies have to be carried out under the constraint of the degree of openness of the economy and the institutional framework. The higher the former and the more rigid the latter, the more limited such policies will be.

We know that in the long term smallness imposes its limits to economies of scale. The widening of the insular market by regional integration and the access to external markets will remain a necessity. But in a first phase, the emphasis in development policies must be trans-

ferred to measures facilitating the creation of closer relations of interdependence between production, consumption, wages and productivity within island economies.

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