

Industrialization Policies and Economic Growth

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by

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Perhaps the time has come now when economists in the Caribbean should review what we have learned about economic growth policies for the region. Theories of macro-economic growth were among the principal concerns of Caribbean economists in the years of the first flowering of the discipline in this region, and many of our finest economists had something to say about the structure of Caribbean economy and the policies that would serve to modernise it⁽¹⁾. In more recent times we seem to have moved away from this level of generalisation; for a while the Marxists had the field to themselves⁽²⁾, with Demas (1976) as the only active economist hewing to the earlier tradition. The economists who began to publish in the mainstream tradition in the 1970's have stuck by and large to sectional issues such as finance or employment or the balance of payments.

In the meantime active economic policy making has become the norm in the English-speaking Caribbean, with the availability of economic statistics, the establishment of planning agencies and the advent of central banks. There is danger that policy making will fall into a rut defined by eviscerated versions of the insights of the 1960's, unless we take a fresh look at the old propositions in light of the experience accumulated in the last decade and a half. We intend to take a second look at four propositions which still seem to have currency in policy making in the Caribbean and to discuss how they have been reflected in development policies in Barbados. We do not

1: Among the best-known contributors are Best (1968), Seers (1962), Girvan (1971) Beckford (1972), Demas (1965).

2: The best example of a general theory in the Marxist mould to come out of the Caribbean is perhaps Thomas (1974).

expect to derive radically new hypotheses, but perhaps we can eliminate a few inconsistencies and blow away some fuzzy thinking.

We have chosen four propositions, one in finance and three on aspects of industrial policy, where we detect some confusion. First, the relationship between finance and growth; is there a good reason to expect that growth in banking liabilities will contribute to growth in output? Second, labour intensity and comparative advantage; should industrial incentives be structured so as to favour labour-intensive industry? Third, tariff protection and efficiency; do Caribbean governments encourage inefficiency with their tariffs to keep out competing imports, and do they have any alternative? Fourth, price competitiveness in export markets; is it feasible, as a long run marketing strategy, to try to sell industrial exports from the Caribbean as cheaply as any potential competitor?

In what follows we debate each of these propositions in turn. In each case we examine what the Barbadian experience has to tell us about the assumptions that are relevant to this kind of economy. The second half of the paper attempts a more general analysis of industrial development policies in Barbados, beginning with a description of the policies and concluding with an attempt to draw out some of the implications of the arguments made in the first part.

Finance and Growth

In the 1970's economists discovered that finance promoted economic growth, following the work of Goldsmith (1969), McKinnon (1973), Shaw (1973) and

others⁽³⁾. Financial 'liberalisation' and financial 'deepening' now bear prominently the cachet of international institutions and development theorists. It is not often said, but the theories depend heavily on the savings constraint. Development theorists in the tradition of Chenery-Strout (1966), Bruno (1967), Ranis-Fei (1969) and others identified three potential growth constraints: domestic savings, foreign exchange and absorptive capacity. At different stages of growth, different constraints might be binding. We need not go too deeply into the rationale for or the critiques of this notion. True, none of the constraints is absolute: if a country has limited absorptive capacity it is possible, in theory, for it to use some of its foreign exchange to buy skills abroad. Similarly, 'excess' savings should be used to produce goods to sell abroad if foreign exchange is the crucial bottleneck. The real problem is that with given economic structures and an existing constellation of social and political forces there are limits to how much can be done to substitute and how quickly. Importation of skills beyond a certain point leads to surrender of local control over the direction of economic change, developing new export markets takes time, and so on. So the three-gap⁽⁴⁾ hypothesis remains a useful working tool.

Financial development will permit faster growth only if domestic savings is the constraint. Suppose absorptive capacity is. Investment is lower than government would like but producers are slow to penetrate export markets, investors are hesitant to support new ventures, small firms are not growing. Moreover, those

3: Like all discoveries in economics, this was known all along by perceptive writers and by practitioners. Lewis (1955) comments on the importance of financing stocks (p 212). Bankers in the Caribbean have never been in any doubt about the importance of overdrafts to the growth of business.

4: The literature usually refers to 'two-gap' models, apparently on the notion that absorptive capacity is difficult to measure so we may pretend it is not a problem.

who stick their necks out soon run into difficulties: one or two firms take bold export initiatives but can't deliver on time, to agreed specification or in the required quantity, or they don't get paid. One or two investors get into novel lines and lose their shirts. A few small firms start growing and run into management and financial problems. These are the indicators of capacity limitation. Clearly, the financial sector has no answer to these problems. By the same token, it will not help much to provide more (or 'better') finance if the country's growth is held up for lack of sufficient foreign exchange⁽⁵⁾.

In countries with a domestic savings constraint the development of financial infrastructure may help to stimulate faster growth, but only if more rapid financial accumulation is accompanied by more effective allocation. The usual index of financial development is the ratio of liabilities of the financial system to gross national income. The fact that this ratio increases tells us nothing about changes in domestic savings rates until we know how the matching assets of the financial system have been allocated between consumption and investment. For if the extra financial instrument finances consumption, at the end of the day savings are no higher than they would have been in the absence of the financing⁽⁶⁾.

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- 5: A restatement and elaboration. There is a foreign exchange constraint only if further output requires more foreign exchange than is available and additional foreign exchange cannot be secured by switching domestic production towards exports or switching domestic consumption away from foreign goods, within the time that the policy makers wish growth to accelerate. Naturally, if switches are possible, financial policy becomes relevant.
 - 6: This notion will not be new to Caribbean economists (See Odle (1972) p and Thomas (1972) p) but economists in the North American mainstream have neglected it. They can afford to, because in the economies they create in their writings substitution is always possible so no one constraint is binding. Policy makers cannot afford to follow suit, unfortunately, because they must cope with the real world where substitution will certainly not happen soon and may conceivably not happen at all.

There is another line of argument we must put out of the way. Finance, McKinnow (1973) argues, is a factor of production. Therefore, more finance, more production? Only if there is perfect technical substitutability among factors of production, or at least between finance and some other factor which creates a potential bottleneck (for example, management skills). Once we drop this implausible assumption there is not much left in the argument.

Table 1 gives some indicators of the importance of financial development for growth in Barbados. Compare average growth rates over five-year periods with average monetary liabilities-to-GDP (TML/GDP) ratios and credit allocation for the corresponding periods. We would have preferred the breakdown of credit and investment, which is not available, but we know that credit to the personal and distribution sectors is almost all for consumption. We are not sure how much of the remaining credit is also for consumption, so we bias the results in favour of those who think finance promotes growth by assuming that anything that is not for the two sectors shown separately goes for investment purposes. If financial development has promoted growth we should see the following: for periods when growth was relatively high, the TML/GDP ratio was high and the proportion of credit for 'other' was high⁽⁷⁾. The table speaks for itself.

We suspect that domestic savings have not been the growth constraint in Barbados. *

Savings ratios have been quite high on occasion, averaging over 20% for several years in succession over limited periods. However, these periods have not usually been those when growth rates were highest. On the contrary, where growth was most rapid domestic savings rates were less than 10% and even negative on

7: The fact that there was such an association would not prove the importance of finance; it would merely suggest that the hypothesis is plausible. Since there is no clear association the point is academic.

occasion (See Worrell (1981) pages 19, 20). Furthermore, the ratio of financial liabilities has not increased over time, even though the Barbadian economy has grown persistently, though not without interruption, during the post-war period.

Such indicators as we have suggest that foreign exchange has not been a binding constraint either. For one thing, two of the three leading export sectors suffer from chronic excess capacity. In the tourist sector, average annual bed occupancy rates have seldom exceeded 60%. Spare capacity is also a feature of manufacturing, though the documentation is less precise. The only attempt to measure spare capacity directly (Wilkinson (1978)) found evidence of idle machinery in the important clothing industry, but we are not told what proportion of total capacity it represented. However, the low incidence of a second shift is evidence of unused capacity; in November 1981, eight of 32 food processing firms employed a second shift; three of 12 firms making beverages and tobacco, four of 21 firms in electronics assembly and only one of 32 clothing manufacturers did likewise⁽⁸⁾. If it were only the extra unit of foreign currency that the country needed for faster growth it could have utilised some of this idle capacity. The problem was precisely that it could not.

Labour Intensity and Industrial Incentive Policy

Although economic theorists have always been ready to acknowledge that labour is not homogeneous, macro-economic planning in the Caribbean invariably proceeds on the assumption that it is. So that industrial policy is designed to promote

8: The results of a telephone survey undertaken by the Central Bank of Barbados, using a list of firms based on the Barbados Industrial Development Corporation's Directory of Manufacturers.

'labour intensive' industry, with no attempt to specify the quality of labour⁽⁹⁾.

This is not the harmless simplification it is usually taken to be; it can lead to quite misleading perscription.

The first thing we must do is to put skills back into the description of the labour force. We may construct a scale of wages for labour which ranges from manual unskilled at the lower end to managenial/professional at the upper. If we take the median wage for any skill level and mark it on that scale we may be sure that there will be no takers for jobs in that category if the salary advertised is much below that.

Next we must explicitly recognise an institutional minimum wage. There is a wage level below which the average worker is not prepared to offer his services, at least not for any length of time. It does not matter that there is a reserve pool of surplus labour. If the available jobs will not pay the required minimum (which is a norm the society tacitly sets) the worker does the occasional odd job and lives at his relatives' expense.

Actually, there is not one institutional minimum, but several. They vary principally with the worker's level of education. At the lowest level of wages where labour services will be offered there will be no secondary school graduates among the applicants even though many of them will not be employed. Their minimum is higher than that.

Policy makers will have to match the level of skill required by new enterprise

9: Because no adequate data on skill levels is available. Of course, so long as everybody is prepared to make do without specifying labour by levels of skill, such data will never appear.

with the country's educational goals and establishment. If the policy is indiscriminately to favour 'labour intensive' industry while secondary education becomes increasingly widespread, unemployment may remain chronic. This happens when industries need manual labour and labour whose skills can be acquired in a few short weeks of training. One option which policy makers may think they have in these circumstances is purely illusory: governments may try to depress the institutional minimum for secondary school leavers by touting the virtues of working with the hands and by a variety of national service schemes. They never succeed in incorporating secondary school leavers into the manual workforce. They are an excellent means of exacerbating social tensions.

The institutional minimum wage may be expected to rise over time, so long as national income per head increases⁽¹⁰⁾. The proverbial man in the street grows to expect decent housing instead of his former slightly dilapidated shelter, he expects to have his utilities brought into his home, he insists on a balanced diet, bare feet are out, and he expects an occasional overseas vacation. He knows he will have to work hard to attain these goals, but he will not work at all for a salary which offers him no realistic chance of reaching them. Formerly, he would have been content to aim for less. In the future, should growth persist, he will need to be assured of more.

This presents a danger, in time, for an industrialisation policy based on employing manual labour. It is possible - likely even - that the institutional wage will rise faster than firms' demand price for labour, given the low skill levels

10: Unless the gains in real income are so concentrated that the society as a whole does not detect their existence.

required. To safeguard existing employment government may then be tempted to the fatal step of additional subsidy. Even for firms which have not yet reached this pass it is an ever present threat; promoting manual-type job creation in a highly literate society with growing material aspirations may be a dangerously short-run employment palliative. It will never eliminate all unemployment, and it may absorb some unemployed only temporarily.

Transferring skills is simply more important than creating jobs. First, it absorbs secondary school leavers and the upwardly mobile, so it offers long-term employment prospects. Second, those who acquire the skills - and we intend both managerial and technical - may themselves generate employment elsewhere, often by establishing their own enterprise. Third, skilled people are more self-reliant and more adaptable; when economic challenges arise they are more likely than the unskilled to contribute to the solution and not to the problem.

Tariff Protection and Efficiency

The 'infant industry' argument is the only valid basis for tariff protection for a wide range of manufactured goods. Because each firm has to learn by doing, manufacturing will never get off the ground if new firms must start out in open competition with foreign firms who have been in the business for years (Lewis (1955), Ranis (1981)). The other arguments for protection are not valid. For example, the argument that governments should create jobs at home. Suppose a protective tariff provides 100 jobs in a firm which would not otherwise locate in the country because its local operation is inefficient - that is, it makes a loss if the product is sold at world market prices. The community is better off if it imports the good and uses an amount equal to the cost of the tariff

to subsidise the employment of 100 persons in an efficient operation. Similar reasoning refutes the argument that industries should be protected in order to save foreign exchange⁽¹¹⁾.

Unfortunately, industrial policy in the Caribbean has taken little notice of this argument, even though it has long been well known. Fiscal incentives have been harmonised to extend for ten years, although there is nothing we can contemplate producing where the firm takes ten years to maturity⁽¹²⁾. As a result, Caribbean governments are probably subsidising a great deal of inefficiency, thereby creating fewer jobs than the available resources will support and generating less growth than the economies are capable of. Evidence of inefficiency is the low level of plant utilisation, already noted⁽¹³⁾.

The long-term development of the economy is threatened by the growth of inefficient manufacturing. As the real supply wage rises in the course of economic development inefficient firms find it harder to survive. They have a strong incentive to try to blackmail government into providing more subsidies by threatening to close and liquidate employment unless such support is forthcoming. Development also produces a more discriminating consumer, who is prepared to pay high premiums to get the goods he wants. If domestic firms

- 11: The other valid arguments for protection do not apply in Barbados - domestication of the production of strategic goods and conservation of basic raw materials.
- 12: There is an argument which says that Caribbean countries must offer 10 year exemptions because other countries do. It is a bad argument. Let the other countries take the inefficient firms.
- 13: A study currently underway to measure levels of effective protection in the Caribbean should provide further evidence. Extremely high protection creates a prima facie case for the existence of inefficiency.

cannot meet his standards they will be unable to maintain sales⁽¹⁴⁾. Thirdly, over-protection may isolate the firm from technical changes and the gains to be made from them.

It is not inevitable that Caribbean countries should live with inefficiency. It may not be feasible to begin a process of weeding out until the manufacturing sector has achieved a degree of maturity. But once there is enough industry to generate economies external to the firm the process of removing supports might begin. When new firms are able to find competent managers and skilled workers who have learned their trade in existing concerns, when they find adequate transportation arrangements already set up to service the existing traffic, when there are established firms willing to take a share in a new venture, policy makers should realise that the time for a shake-down has come.

Price Competitiveness and Export Marketing

The argument that Barbados' manufactured exports should be price competitive is absurd and has no support in theory or practice. Theory tells us that the demand curve facing a small producer like Barbados is infinitely price elastic. The country may sell whatever it can produce at the going world market price; if it cannot profitably supply at that price it will sell nothing. In the long run, supply is also infinitely price elastic. So long as it remains profitable to supply at the going world prices, it makes sense for the small producer to go on

14: The goods the more affluent consumer requires are sometimes of higher quality; however, often they are simply more attractively packaged or more aggressively marketed. The inefficient domestic firm suffers anyway; the moral is that efficiency must be measured over the firm's total operations, not just production.

increasing capacity⁽¹⁵⁾. The price, therefore, has very little to do with the level of production. Output is determined by the qualitative inputs - management, enterprise, marketing skills, knowledge. For any product there are only two possibilities. Where technology, transportation costs and local incentives make profitable production feasible, output will be as great as the qualitative inputs will allow. Elsewhere there will be no production at all.

The case for price competition is often made in connection with wage policy issues. Wage push may cause costs to rise to the extent that it no longer becomes feasible to produce a particular product, and that line of industrial activity may be threatened with extinction. The firms involved are not without recourse; it is usually possible to economise on the use of labour by using more sophisticated machines. If that cannot be done, government should resist the temptation to mount costly rescue operations. Workers must be free to raise the institutional wage, but they will have to accept that there is an unemployment cost which comes into play once we exceed the limits set by the product markets and the available technology⁽¹⁶⁾.

15: The classical theory which produces an infinitely elastic long-run supply curve assumes that all factor markets are integrated. In practice, there are restrictions in the international mobility of labour and capital. Barbados may not be able to expand a profitable line of manufacturing because potential foreign investors cannot get funds out of their own countries or because they cannot persuade individuals with specific essential skills to make their homes in Barbados for a period sufficient for local training. But the restrictions on international factor mobility are not sufficiently great (relative to Barbados' needs) to be of much account.

16: It is often assumed that workers - in particular unionised workers - are too obstinate, militant, selfish and irrational to moderate wage demands which threaten to create unemployment. Workers are smarter than that, of course. They understand that technological sophistication is inevitable, whatever the level of wages, if only because the people who make machines are no longer turning out the old simple ones. They also understand that most elected governments are too chicken to allow the collapse of a whole area of industrial activity. Government can always be blackmailed into bailing out the industry, so there are in fact no dangers in pursuing an adventurous wage policy.

Economists like to think that policy can correct for workers' unco-operativeness by tampering with the exchange rate (Lewis (1972), Demas (1976), Caricom Secretariat (1973), World Bank (1974)). In the open economy devaluation is an attempt to force the entire community to subsidise employment in the marginal export sectors. Prices rise and real incomes fall everywhere, while exporters who were threatened with bankruptcy at the old exchange rate stay in business. Unfortunately for the economists the population at large very seldom agrees to the subsidy foisted upon them. They react by raising wage demands all round. The old marginal exporters whose interests the economists hold so dear are back where they started, on the verge of collapse. Firms in other activities are faced with more insistent and more inflationary wage demands than they otherwise would be, and the climate of industrial relations deteriorates. The country's latter state is many times worse than its first.

We all know that price competitiveness is not the only way to secure markets. If it were, there would be no export industry in the Caribbean, except perhaps in Haiti. Even allowing for transportation costs, the Far East does everything the Caribbean can do, more cheaply. Also, performance among domestic firms varies enormously; some firms maintain vigorous export sales while others selling in the same markets falter. Still much discussion of export strategy presumes that there is mileage to be made from price competition.

That presumption is misguided. The scope for gaining cost advantages is very narrow when your average standards of living are already close to those of 'newly-industrialising countries' (Taiwan, Korea, Singapore, Brazil), and where your technology is not yet competitive with theirs. Developing countries must

also realise that in the price scramble they are yielding a disproportionate share of productivity gains to consumers in industrialised countries (Dornbusch (1981)). There is an alternative, far more preferable, way to compete when you start with the advantage of a highly literate population with a sound basic education - product differentiation. It is a more demanding strategy than price competition: aggressive but highly selective marketing, quality control, production co-ordination (often among several firms) and sophisticated planning are all involved. The payoff is lower risk and greater domestic flexibility.

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Table 1

FINANCIAL DEVELOPMENT AND GROWTH

	Real Growth Rate	TML/GDP ¹	CRO/CR ²
1946-50	5.5	62.7	
1951-55	0.6	67.3	
1956-60	1.6	55.7	
1961-65	4.2	49.5	
1966-70	4.4	63.9	68.0
1971-75	-0.2	57.3	47.8
1976-80	5.1	51.0	61.5

Notes:

1. Ratio of total monetary liabilities of the banking system to GDP.
2. Ratio of (a) credit to all sectors except personal and distribution to (b) total credit.

Sources: DeLisle Worrell, 'Note on Real GDP',
Central Bank of Barbados (mimeo) November 1981.