Sir Arthur Lewis Prize Lecture

Lecture to the memory of Alfred Nobel, December 8, 1979

The Slowing Down of the Engine of Growth

Let me begin by stating my problem. For the past hundred years the rate of growth of output in the developing world has depended on the rate of growth of output in the developed world. When the developed grow fast the developing grow fast, and when the developed slow down, the developing slow down. Is this linkage inevitable? More specifically, the world has just gone through two decades of unprecedented growth, with world trade growing twice as fast as ever before, at about eight per cent per annum in real terms, compared with 0.9 per cent between 1913 and 1939, and less than four per cent per annum between 1873 and 1913. During these prosperous decades the LDCs have demonstrated their capacity to increase their total output at six per cent per annum, and have indeed adopted six per cent as the minimum average target for LDCs as a whole. But what is to happen if the MDCs return to their former growth rates, and raise their trade at only four per cent per annum: is it inevitable that the growth of the LDCs will also fall significantly below their target? My purpose is not to predict what is going to happen, but to explore existing relationships and how they may change.

The extraordinary growth rates of the two decades before 1973 surprised everybody. We knew that the world economy experiences long swings in activity; that world trade, for example, grew faster between 1830 and 1873 than it grew between 1873 and 1913, that is to say between four and five per cent before 1873, compared with between three and four percent after 1873. But a jump to eight per cent was inconceivable.

Some people were even more surprised by the performance of the LDCs. In 1950 these people were sceptical of the capacity of LDCs to grow rapidly because of inappropriate attitudes, institutions or climates. The sun was too hot for hard work, or the people too spendthrift, the government too corrupt, the fertility rate too high, the religion too other wordly, and so on. This kind of analysis has now almost completely gone from the literature. In discussions at the end of the 1940s noting that US national income per head had grown at about two per cent a year over long periods, and noting that LDC populations were growing at about one percent, economists in UN circles were boldly discussing the possibility that the LDC growth rate might be three per cent. The United Nations at the end of the 1950s fixed five per cent as the target for the sixties, meaning by "target" something that was unattainable but inspirational. Then to everybody's surprise UN figures showed five per cent being averaged already by the middle sixties. So the target was raised to six per cent for the 70s but the figures showed six per cent already in the early seventies, and the UN was just getting ready to fix seven per cent for the 1980s when the recession started in 1974. I do not vouch for the accuracy of any of these performance figures, but I think LDCs have demonstrated beyond doubt their capacity to use physical and human resources productively.

The fast pace of world trade also played havoc with development theory. The collapse of international trade in the 1930s had seemed irreversible, so much so that Keynes had even

declared that we didn't need much of it anyway. So in the 40s and 50s we created a whole set of theories which make sense if world trade is stagnant – balanced growth, regional integration, the two-gap model, structural inflation – but which have little relevance in a world were trade is growing at eight per cent per annum. Also many countries basing their policies on the same assumption, oriented inwards mainly towards import substitution. The fact that trade was growing rapidly was not universally recognised until the second half of the sixties. Then nearly every country discovered the virtues of exporting. Now we are in danger of being caught out again. Since 1973 the growth rate of world trade has halved, and nobody knows whether this is temporary or permanent. But most of our economic writing continues to assume implicitly that a return to eight per cent is only just around the corner.

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Let me come back to the relationship between MDCs and LDCs. The principal link through which the former control the growth rate of the latter is trade. As MDCs grow faster, the rate of growth of their imports accelerates and LDCs export more. We can measure this link. The growth rate of world trade in primary products over the period 1873 to 1913 was 0.87 times the growth rate of industrial production in the developed countries; and just about the same relationship, about 0.87, also ruled in the two decades to 1973. World trade in primary products is a wider concept than exports from developing countries, but the two are sufficiently closely related for it to serve as a proxy. We need no elaborate statistical proof that trade depends on prosperity in the industrial countries. More interesting is the evidence that the relationship was quantitatively the same over a hundred years, so that the two-thirds increase in the rate of growth of exports of primary products from LDCs was no more or less than could be predicted from the increased rate of growth of MDC production.

Most interesting is that the coefficient is less than one, viz. 0.87. This means that if the engine of growth was industrial production in MDCs and exports of primary products in LDCs, then the MDC engine was beating slightly faster than the LDC engine. The effects of equal beating would not necessarily be exactly the same. And there are side effects that strengthen the connection. When the beat is faster the terms of trade are expected to be more favorable to the LDCs (though that did not happen this time). The domestic market prospers, so LDC industrialisation for the domestic market is speeded; this happened. MDCs relax their barriers to imports of manufactures, so this trade accelerates as well. Foreign capital flows into minerals, manufactures and infrastructure. And foreign countries take more migrants, so that the homeward flow of remittances to LDCs is larger in prosperous times.

Putting it all together, including the fact that industrial production grew faster in LDCs than in MDCs, it is not surprising that the rate of growth of gross domestic product was just about the same in LDCs and in MDCs over the quarter of a century ending in 1973, namely about five per cent per annum. Since LDC population was growing faster than MDC population, there is a big gap in the growth rates of output per head, about four per cent in MDCs, against 2 1/2 per cent in LDCs. The performance of LDCs was remarkable in absolute terms, but the gap between MDCs and LDCs in income per head continued to widen rapidly.

Here we come to our dilemma. The objective of most people who are concerned with these matters is to narrow the per capita gap between MDCs and LDCs. But how is one to do this if

they are linked to equal growth of total output? One might perhaps conceive a lower rate of growth of MDCs. Many MDC voices are calling for this – the environmentalists, the persons who fear exhaustion of exhaustible resources, the advocates of greater grace and leisure in our lives, and others. But if the MDC growth rate falls, the LDC growth rate will fall too, and LDCs will get the worst of it, since the terms of trade will move against them. Given the link, it is in the interest of LDCs that the MDCs should grow as rapidly as they can.

This line of argument assumes that economic growth in response to the growth of world trade has been good for the LDCs rather than bad. A voluminous literature denies that the relationship is beneficial. To discuss it here in detail would take us too far afield, but something must be said about that part of it that declares that trade does not foster growth; or that if it does, its kind of growth does not become self-sustaining. (I stick to Rostow's terminology instead of the latterday contrast between growth and development, which is less revealing.)

Trade allegedly does not foster growth because when it begins, a flood of imports of factory origin destroys the handicraft manufacturing of the less developed country: the models for this are the effects of British exports of textiles and of iron in India and Chile in the first half of the nineteenth century. To be sure there will be exports and soon exports and imports will be equal. But balance of payments equilibrium does not imply that what is lost via imports is gained via exports, since such equilibrium is compatible with any level of unemployment. So the alleged benefits of trade may be taken out in the enforced leisure of unemployment. The exports, if agricultural, do not generate enough purchasing power to provide a base for significant industrialisation, since the factoral terms of trade are unfavourable to tropical countries. If mineral, their prosperity may be equally damaging from the side of costs, since it may set a level of wages and incomes so high that it prevents other industries from surviving, once again taking the benefits in the form of unemployment with a balanced payments budget. This argument is used mainly to explain why some mineral-rich LDCs have so much unemployment, but it can be generalised to other exports.

Trade may or may not have fostered growth in the first half of the nineteenth century, but it surely does so now; regression analysis shows the rate of growth of exports as one of the most powerful elements in the rate of growth of LDC output. Whether or not this kind of growth can become self-sustaining is a different question. Two conditions of self-sustaining growth are that a country has acquired a cadre of domestic entrepreneurs and administrators, and secondly that it has attained to adequate savings and taxable capacity. Here the dissenters point out that export and import trade comes to be concentrated in the hands of a few large foreign concerns (including banking, insurance and shipping) who prevent the emergence of domestic entrepreneurship. As to saving, this comes significantly from profits, and if profits are in foreign hands the domestic savings capacity is constrained. These same foreign traders and financiers unite with the farmers in political opposition to measures to foster industrialisation, which threatens their market for imports, as well as their sources of cheap labour. The economy may grow rapidly, but its growth will not be self-sustaining, because domestic entrepreneurship and domestic saving are both stunted.

These propositions have some validity, but the situation they describe is not universal or inevitable, and its significance is greatly diminished by changes in the political climate since the

onset of the great depression of 1929; also the alternative policy of balanced growth which the criticism implies is not always feasible. Growth requires physical infrastructure and trained manpower, even when its purpose is only to export primary produce. Money is spent on schools, including universities, and the country builds up a cadre of educated persons. In these respects, which are important also to self-sustained growth, the gap between countries with high export ratios and those (of similar size) with low export ratios is substantial. At some point these cadres take over the government and pursue nationalistic policies, including curbing the activities of foreign firms, forcing them to hire and train domestic managers, and taxing their profits. The failure of Latin American governments to push industrialisation before 1929 was due to the intellectual supremacy of the doctrines of free trade and unregulated markets, as well as to the power of the landed classes. This supremacy has now ended everywhere in the world. Thus countries create human capital whether they travel via export growth or via balanced growth. Except that the opportunity for balanced growth is given only to the larger countries. Most MDCs are small, and have no option but to grow through exports. Advocates of the balanced growth alternative are also always advocates of political federation or unions of states; in the absence of such a political framework the criticism of growth via exports rests on unspoken and non-existent alternatives.

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In what follows I shall assume that industrial production in MDCs grows more slowly than it was growing before 1973, and that the imports of these countries grow only at four per cent a year, over the next twenty years. This is not a prediction; it is merely the assumption whose consequences we are seeking to analyse.

I shall also assume that LDCs want their GDP to grow at six per cent per annum, and that this requires their imports to grow at six per cent. This linkage follows from the further assumption that the individual LDC will not become more self-sufficient, perhaps because it is too small; though LDCs as a group will have to be more self-sufficient. No importance attaches to whether the figure for imports is the same as the figure for the growth of gross domestic product; all that matters is that the growth rate of exports from LDCs is assumed to be significantly higher than the rate of growth of imports of LDC commodities into MDCs. LDCs will continue to pay for some of their imports out of proceeds of transfers, including foreign aid and private foreign investment, but we shall assume that this still leaves LDCs needing say a six per cent growth rate for exports, while MDCs are assumed to increase their imports from LDCs only at four per cent a year. The problem is how to reconcile these two growth rates.

There could theoretically be a simple way, namely for LDCs to have an ever increasing share of MDC imports, but we have closed this door. The main link between MDC and LDC economies has been the MDC demand for LDC primary commodities. This has been a link in terms of physical volume, not much affected by prices. LDCs could not sell significantly more by reducing prices; on the contrary, they would earn substantially less purchasing power as the terms of trade deteriorated. LDCs could earn more by reducing the volume or by joining together in raising prices. The direct effect of these actions would be to reduce output, but this could be offset by investing the extra earnings judicially. However, none of this seems to be in the cards; so we shall assume that our problem cannot be solved by accelerated or decelerated production of primary commodities normally exported to MDCs.

What about manufactures? These are now 40 per cent of the exports of the non-OPEC LDCs, and are still their fastest growing export. Could the whole problem be solved simply by increasing the growth rate of manufactured exports to MDCs, in substitution for primary products? I shall assume that this cannot be done, since if it can be done my paper ends abruptly. Also I do not think that it can be done. MDCs are willing to let in manufactured exports when they are prosperous, since they then have many growing industries that can take in people displaced by imports. Our assumption that the MDC growth rate is low rules out this possibility. It would indeed be more appropriate to assume that MDCs will take less manufactures from LDCs rather than more.

Our basic assumptions therefore are that LDCs need to have their exports grow at six per cent a year, but MDCs will increase their imports from LDCs only at four per cent a year. What is to happen to the growth of LDC output?

Let me concede at once that from the standpoint of the individual LDC it matters not at all what the MDC growth rate may be. Given resources and flexibility, it can always sell more to MDCs. However, it thereby displaces some other LDC's trade. What one can do cannot be done by all.

At the level of arithmetic this problem now has only one solution. If total sales from LDCs increase at six per cent, while sales to MDCs increase at four per cent, sales to the rest of the world (given weights of seven to three) must increase initially at about 11 per cent per annum. Ignoring the socialist countries, which could help by buying much more from LDCs but won't, the LDCs can solve the problem only by accelerating sharply their trade with each other.

Inter-LDC trade is still rather small – about 19 per cent of the export of non-OPEC LDCs. The percentage has not changed significantly over the past two decades despite all the effort that has gone into creating and servicing regional trade institutions. Can this trade take up the slack left by MDCs as MDCs slow down?

The answer is in the affirmative. Currently the LDCs depend on the MDCs for food, fertiliser, cement, steel and machinery. Taken as a group LDCs could quickly end their dependence for the first four, and gradually throw off their dependence for machinery. They also import a considerable quantity of light manufactures for which they are not in any sense dependent (some \$31 billion in 1977, compared with \$47 billion of engineering products). They could quickly rid themselves of these, and more gradually throw off their dependence for machinery.

LDCs are capable of feeding themselves now, if they adopt appropriate agrarian policies and, as our eleven new international tropical agricultural research institutes give us better varieties and improved technology, output should more than keep up with population. The problem is to get through the period while the birth rate remains obstinately high to the less frightening times when the birth rate will have dropped below 20 per thousand. It may be a near thing, but we should make it.

As for fertilisers, cement and steel, these are made by applying standard technology to raw materials that are widely available outside the MDCs. Machinery is more bothersome because important parts of this trade involve economies of scale, continually improving technology, and

patented or secret knowledge. However, several LDCs are moving into this field, and already machinery is 15 per cent or more of the output of manufactures in at least eight LDCs, (India, Brazil, Singapore, Chile, Korea, Argentina, Mexico and Israel). LDC exports of engineering products are also growing rapidly, and contrary to popular belief, already exceed LDC exports of textiles and clothing in value. There is no reason why LDCs as a group should not become nearly self-sufficient in standard types of equipment.

If all this scope exists for inter-LDC trade, why have the regional customs unions not been more successful? Note three reasons.

First, a region is not a homogeneous area. Some countries are much more advanced than others in industrial competitiveness, to an almost inconceivable extent. These advanced countries attract more new industries than the less advanced, who feel exploited by the customs union. The union then survives only if costly measures are taken to placate the less advanced, and these measures are difficult to negotiate.

Secondly, the usefulness of the union is maximised in sharing out industries with substantial economies of scale, extending over the whole regional market. Each country is anxious to keep for itself all those industries that can attain the economies of scale within the national market. Destruction of any of these industries by competition from another member of the union causes a political uproar. The union is therefore safest where it does not require internal free trade in all commodities, but instead concentrates on those few "integration" industries as they are called which need the whole regional market. Even this more modest task is hard to negotiate if each member country is to have its fair share of integration industries.

The third reason why the customs unions have not done better is that their basic assumption — that a country should trade most with its next door neighbours — is no longer true in these days of very low transport costs. For reasons of climate, soil and history the next door neighbour is probably in the same business, and not a potential customer or supplier. He is equally poor, and therefore offers an equally limited market. LDCs developing new industrial products are drawn to large rich MDC markets rather than to those of their neighbours. Frankly, in the 1950s and 1960s aggressive developers did not much need the support of customs unions; these offer more to their members when world trade is stagnant than when it is booming.

It follows, therefore, that in the situation we are analysing, where world trade decelerates, customs unions would be more highly prized, and would be made more effective, especially in regard to large scale industries with region-wide economies of scale. But even so the leading commodities that LDCs would now have to produce to a greater extent for each other cannot be shared out between next door neighbours on a political basis. Food, fertilisers, cement and fuel pick their locations more in terms of raw material availability, and machinery will come in the first instance from those LDCs that already have a substantial industrial base. This new LDC trade would be worldwide, just as European and US trade are worldwide. III I am therefore arguing that it is physically feasible for LDCs to maintain a high rate of growth even if MDCs decide otherwise for themselves. How does physical feasibility translate into an effective economic framework?

One way would be to follow the customs union route, with LDCs giving preferential treatment to imports from other LDCs. The nucleus of this exists already in the Protocol Relating to Trade Negotiations among Developing Countries which came into force in 1973, with the blessing of GATT, and which provides for negotiated preferential arrangements among sixteen of the bigger and more advanced LDCs. The philosophy of such an arrangement is in line with the spirit of Bretton Woods, which recognised the rights of countries to impose restrictions on other countries which were tending persistently to run balance of payments surpluses, as would be the situation if the LDCs were growing faster than the MDCs. One may doubt however whether such different countries will get very far along the route of preferential concessions. If they are to prefer each other's goods, this will have to be because they are competitive in price with those of MDCs.

In the economist's model this competitiveness would come about automatically. The LDCs would run a balance of payments deficit because of the MDC slowdown, yet persist in their own rapid growth instead of slowing down themselves. Adjustment comes in the old gold standard version through an outflow of gold that reduces their price levels; or in the modern versions by devaluation, which has the same effect. The real world is more complicated. Inflation is universal, but aggressive sellers of manufacturers have to keep their prices down; so this set of LDCs would need special emphasis on inflation controls. Devaluation cannot be avoided when prices cease to be competitive, but is palliative rather than curative in situations where it triggers further increases in domestic costs that reinstate the differential that it was to eliminate. LDCs have the same problems as MDCs, that the domestic price level can no longer be controlled merely by twirling general controls, such as the rate of interest or the supply of money or the rate of exchange for the currency. They too now experience the cost-push element in price determination, for which the only remedy is same sort of incomes policy. We expect more from the economic system than our grandparents did in the nineteenth century, by way of full employment and faster growth, and should not be surprised that the economic system requires more from us, by way of supporting institutions.

These new aggressive LDCs, exporting machinery to each other and to other LDCs, may also have problems in financing their trade. Nearly every LDC has a separate currency. We are envisioning Nigeria selling cereals to India for rupees, with which it buys machinery from Brazil. Some kind of clearing agreement may become necessary; otherwise LDC traders will tend to do business with each other in one or more MDC currencies, and will be constrained by the relative scarcity of such currencies. Perhaps the IMF would straighten this out. A more serious problem will be to finance the export of capital goods from one LDC to another, since the seller is expected to finance the buyer. It is not likely that the LDC exporters can do this on their own. We must assume that they will be allowed to raise untied loans in the MDC financial markets, perhaps using the regional development banks as intermediaries to a greater extent than is now the case.

But the real problem is not whether LDCs can become competitive and hold their own in each other's market. Problems of pricing and foreign exchange can work themselves out in the world market. The real problem is whether LDCs will persist in rapid growth despite the slow down of the MDCs. If the economy is still dependent, the balance of payments will pull it down; but if it has attained self-sustaining growth, the weakness in the foreign exchanges merely launches a

drive to export to other LDCs, and the weakness in the balance of payments is then only transitional.

If a sufficient number of LDCs has reached self-sustaining growth we are into a new world. For this means that instead of trade determining the rate of growth of LDC production, it will be the growth of LDC production that determines LDC trade, and internal forces that will determine the rate of growth of production. Not many countries are ready to make this switch. India is an obvious possibility, along with some of the other subscribers to the Protocol of 1973. It is not possible for all LDCs to make this switch and neither is it necessary; for if leading LDCs grow fast and import heavily they will substitute to some extent for the former rapid growth of MDCs. For those who use the language of centre and periphery, this means that a number of countries leave the periphery and join the centre. Or if they are specially linked to each other by preferential trade and currency arrangements, one may even speak of the creation of a new centre consisting of former peripheral nations that have built a new engine of growth together.

The shadow on this picture is what happens to those LDCs whose best option has been to export raw materials to MDCs. Our exercise starts from the assumption that the growth rate of MDC demand is reduced, so these face surpluses and unfavourable terms of trade. We have provided an escape for LDCs that can turn to exporting food or manufactures, but we have not assumed that the new core LDCs will substitute for the MDCs by drinking more coffee or tea or using more rubber and jute. This solution therefore involves some hardships for the less adaptable LDCs, constrained by climate or by the small size of their markets. A framework for helping them exists already in the IMF's compensatory financing, and in the EEC's STABEX support; but these are meant for temporary fluctuations. Bigger and more persistent support would be required.

Transnational corporations would probably play some part in the establishment of this new inter-LDC trading network. The cadre of domestic entrepreneurs is adequate in the more advanced industrial LDCs to manage most of the range of light consumer goods and light engineering products. One of our main concerns however, is to diminish reliance on MDCs for heavy machinery and such, and this extends into fields where experience is limited. Since we are assuming that the market will send out price signals favouring production in LDCs, whether because of tariffs or of currency adjustments, transnational corporations will be eager to preserve their markets by establishing subsidiaries behind the protective barrier. Hostility to such corporations is universal, and their influence is diminishing in most sectors, especially in mining, public utilities, distribution and finance; but not in manufacturing, where judging by advertisements in the New York Times and the financial press, LDC governments are only too anxious to invite the participation of transnational corporations. There are plenty of restrictions – on the hiring of expatriate staff, on percentages of equity owned by foreigners, on borrowing in the local market, on technology and so on. Also in many cases joint ownership with local capitalists or with government agencies is prescribed. A government anxious to promote industrialisation and a corporation anxious to preserve or extend its market find common ground.

The awkward part of the exercise is to sustain the momentum of six per cent growth through the transition from dependence on MDC trade to dependence on LDC markets. During this transition the leading industrial LDCs must establish their footholds in each others' markets, as well as

those of other LDCs; also the agrarian changes must occur which both feed the urban population and present a growing market for its goods and services. It is possible that some of the leading LDCs can take this in their stride, just as German industrialists launched their trade drive in the 1880s followed by the US after 1895, by Japan in the 1930s, and more recently by Brazil. They do not have to begin with machinery, since LDCs still import so much light manufactures from MDCs. They can start here and move more gradually into machinery.

At the other extreme it is also possible that there is simply not yet enough entrepreneurial steam in the leading LDCs to make this transition without a supporting framework. We have already mentioned the main international elements of such a framework, namely preferential tariff and currency arrangements. The domestic element consists of the maintenance of home demand in face of stagnant world trade in primary products, so that the economy can continue to go forward instead of collapsing. Much of the responsibility for maintaining momentum then falls on the government, given its large share of the cash economy, and also the extent to which it regulates or supports the private sector. It has to carry the responsibility for a large investment programme (private and public) in human and physical capital. This responsibility could not be carried without external aid. MDCs would have to be in a mood to say: we will not give you more trade; here for a while is more aid instead.

The recession that started in 1974 has now lasted long enough for LDCs to consider the possibility that MDCs intend to maintain rates of GNP growth which will allow world trade to expand only at around four per cent a year. This would be a major blow to LDC growth aspirations, unless new steps were taken to support rising participation of LDCs in LDC trade. I have been trying to analyse what these steps might be. They ought to figure prominently in current North-South negotiations, but in fact they do not, since these negotiations tacitly assume that high MDC growth rates will soon be resumed. Perhaps this assumption will turn out to be correct; economics does not foretell the future. For the least, LDCs should be discussing among themselves in what directions they would wish to go, prior to negotiations with the MDCs.

Of course, the problems tackled in this paper would not arise at all if MDCs were willing to allow LDCs a greater share of MDC markets. This would be the logical evolution of a situation where LDCs grow faster than MDCs; trade with LDCs should become an ever-increasing portion of MDC trade. We live in a strange world. Through the 1960s and 1970s MDCs have been dismantling their barriers to each other's trade while increasing their barriers to LDC trade. Since imports of manufactures from developing countries are only two per cent of the consumption of manufactures in OECD countries, this indicates exceptional sensitivity to minor change. Lack of sensitivity, on the other hand, characterises the failure of developed countries to recognise that dependence is mutual, in that the non-OPEC LDCs take twenty per cent of OECD exports, and could therefore by their prosperity help a little to sustain OECD prosperity. It can hardly be an OECD interest to force the LDCs into discriminating against OECDs sources.

Neither would these problems arise if the MDCs would return to the attack on mass poverty within their own borders which they launched so successfully in the 1950s and 1960s and have now abandoned; since what we all really need is that world trade recapture its growth rate of eight per cent per year. But that is a different story.