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PATTERNS OF TRADE AND DEVELOPMENT

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PROBLEMS OF CAPITAL FORMATION IN UNDERDEVELOPED COUNTRIES

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THE SIZE OF THE MARKET AND THE INDUCEMENT TO INVEST

OUR first topic has to do with the inducement to invest, such as it presents itself to the individual investor or entrepreneur. It is concerned, in other words, with the conditions that determine the demand for capital for use in the productive process. The dichotomy between demand and supply, so dear to economists, is fully applicable to the forces that govern the accumulation of capital. Capital formation is not entirely a matter of capital supply, although this is no doubt the more important part of the problem. The later chapters will deal with a number of points on the supply side. But there may be a snag on the demand side as well, and this I propose to take up first.

THE VICIOUS CIRCLE OF POVERTY

In discussions of the problem of economic development, a phrase that crops up frequently is 'the vicious circle of poverty.' It is generally treated as something obvious, too obvious to be worth examining. I hope I may be forgiven if I begin by taking a look at this obvious concept.

It implies a circular constellation of forces tending to act and react upon one another in such a way as to keep a poor country in a state of poverty. Particular instances of such circular constellations are not difficult to imagine. For example, a poor man may not have enough to eat; being under-fed, his health may be weak; being physically weak, his working capacity is low, which means that he is poor, which in turn means that he will not have enough to eat; and so on. A situation of this sort, relating to a country as a whole, can be summed up in the trite proposition: 'a country is poor because it is poor.'

Perhaps the most important circular relationships of this kind are those that afflict the accumulation of capital in economically backward countries. The supply of capital is governed by the

ability and willingness to save; the demand for capital is governed by the incentives to invest. A circular relationship exists on both sides of the problem of capital formation in the poverty-ridden areas of the world.

On the supply side, there is the small capacity to save, resulting from the low level of real income. The low real income is a reflection of low productivity, which in its turn is due largely to the lack of capital. The lack of capital is a result of the small capacity to save, and so the circle is complete.

On the demand side, the inducement to invest may be low because of the small buying power of the people, which is due to their small real income, which again is due to low productivity. The low level of productivity, however, is a result of the small amount of capital used in production, which in its turn may be caused at least partly by the small inducement to invest.

The low level of real income, reflecting low productivity, is a point that is common to both circles. Usually the trouble on the supply side receives all the emphasis. The trouble there is certainly obvious and serious, and some aspects of it will be thoroughly gone into later. But the possible block on the demand side, once one becomes aware of it, is also fairly obvious, though it may not be so serious, or so difficult to remove, as the supply deficiency.

Besides, let us remember that capital is not everything. In addition to the circular relationships that plague the capital problem, there are, of course, matters of unilateral causation that can keep a country poor; for instance, lack of mineral resources, insufficient water or barren soil. Some of the poorer countries in the world to-day are poor partly for such reasons. But in all of them their poverty is also attributable to some extent to the lack of adequate capital equipment, which can be due to the small inducement to invest as well as to the small capacity to save.

WEAKNESS OF INVESTMENT INCENTIVES

It may at first be surprising to hear that there can be anything wrong on the demand side of the problem of capital formation in underdeveloped countries. Can there be any deficiency in the demand for capital? Are not the backward areas, almost by

definition, greatly in need of capital for the efficient use of their labour and for the exploitation of their natural resources? Is not the demand for capital in these areas tremendous? It may well be; and yet in terms of private incentives to adopt capitalistic methods in the productive process there is the difficulty that stems from the limited size of the domestic market in the early stages of a country's economic development.

The inducement to invest is limited by the size of the market. This proposition is, in effect, a modern variant of Adam Smith's famous thesis that 'the division of labour is limited by the extent of the market.'¹ The point is simple and has long been familiar to the business world. It is a matter of common observation that in the poorer countries the use of capital equipment in the production of goods and services for the domestic market is inhibited by the small size of that market, by the lack of domestic purchasing power, not in monetary but in real terms, in a sense to be presently defined. If it were merely a deficiency of monetary demand, it could easily be remedied through monetary expansion; but the trouble lies deeper. Monetary expansion alone does not remove it, but produces merely an inflation of prices.

This simple point, that the incentive to apply capital is limited by the size of the market, has a certain validity not only in the exchange economy of the real world, but even in the economy of an isolated individual like Robinson Crusoe, well known to our forefathers from elementary textbooks. Suppose that Robinson Crusoe had two or three hundred nails (which he got, let us say, from a wooden box washed ashore on his island) and wanted to drive them into some trees in order to hang up his fishing nets or personal effects. It would pay him first to sit down and make a simple hammer with which to drive these nails into his trees. His total effort would be reduced; he would do the job more quickly. But if he had only two or three nails it would not be worth his while to make a hammer. He would pick up and use a

¹ It was Allyn A. Young who suggested this re-interpretation in his well-known essay, 'Increasing Returns and Economic Progress,' *Economic Journal*, December 1928 (now reprinted in *Readings in Economic Analysis*, edited by R. V. Clemence, Cambridge, Mass., 1950, Vol. I). It is easy to see, and Adam Smith recognized it himself, that the division of labour is closely connected with the use of capital in production.

stone of suitable size. It would be a slow and inconvenient method; but it would be uneconomic to produce capital equipment in the shape of a hammer just for driving in two or three nails.

In the exchange economy of the real world, it is not difficult to find illustrations of the way in which the small size of a country's market can discourage, or even prohibit, the profitable application of modern capital equipment by any individual entrepreneur in any particular industry. In a country, for instance, where the great majority of people are too poor to wear leather shoes, setting up a modern shoe factory may be a doubtful business proposition; the market for shoes is too small. Many articles that are in common use in the United States can be sold in a low-income country in quantities so limited that a machine working only a few days or weeks can produce enough for a whole year's consumption, and would have to stand idle the rest of the time. In Chile, for example, it has been found that a modern rolling mill, which is standard equipment in any industrial country, can produce in three hours a sufficient supply of a certain type of iron shapes to last the country for a year. In these circumstances the inducement to install such equipment is lacking. In some cases foreign branch plants which had been established in certain Latin American countries were subsequently withdrawn because it was found that the local market was too small to make their operation profitable.¹

These examples may exaggerate the difficulty, but I do believe that, to some extent, the difficulty is real. To produce with more capital per unit of output means generally, though not invariably, producing on a larger scale, in the sense of a larger output per plant. This is what matters in the present context, though it may be noted that in a given line of production any increase in output, even when it maintains the old degree of capital-intensity, will be discouraged by the smallness of the market.

The economic incentive to install capital equipment for the production of a certain commodity or service always depends in some measure on the amount of work to be done with this equip-

¹ For these and other examples, see G. Wythe, *Industry in Latin America* (New York, 1951).

ment. Naturally the individual business man must take the amount of work to be done—the size of the market for his commodity or service—more or less as he finds it. He may hope to be able to deflect some of the present volume of consumers' demand in his own favour; but where real income is close to the subsistence level, there is little or no scope for such deflection. The limited size of the domestic market in a low-income country can thus constitute an obstacle to the application of capital by any individual firm or industry working for that market. In this sense the small domestic market is an obstacle to development generally.

How can this obstacle be removed? What is it that determines the size of the market? Some people may think, in this connection, of monetary expansion as a remedy, others of high-powered methods of salesmanship and advertising. Some may think of the size of a country's population as determining the size of the market; others, again, may have in mind the physical extent of the country's territory. All these factors are of secondary importance, if not irrelevant. A popular prescription is that small adjacent countries should abolish restrictions on trade with each other. But the smallness of a country is not the basic difficulty. The difficulty can exist even in very large countries such as China and India.

The crucial determinant of the size of the market is productivity. In an all-inclusive view, the size of the market is not only determined, but actually defined, by the volume of production. In the economy as a whole, the flow of goods and services produced and consumed is not a fixed magnitude. With a given population, it is a variable depending on people's productive efficiency. It is sometimes said that, if only prices could be reduced (money incomes remaining the same), the market could be enlarged. That is true, but if this were to happen it would imply an increase in productivity and real income. The market would be similarly enlarged if people's money incomes could be increased while prices remained constant. Again, this would be possible only with an advance in productive efficiency, implying an increase in real income. We are here in the classical world of Say's Law. In underdeveloped areas there is generally no 'defla-

tionary gap' through excessive savings. Production creates in own demand, and the size of the market depends on the volume of production. In the last analysis, the market can be enlarged only through an all-round increase in productivity. Capacity to buy means capacity to produce.

Now productivity—or output per man-hour—depends largely, though by no means entirely, on the degree to which capital is employed in production. It is largely a matter of using machinery and other equipment. It is a function, in technical terms, of the capital-intensity of production. But, for any individual entrepreneur, the use of capital is inhibited, to start with, by the small size of the market.

Where is the way out of this circle? How can the market be enlarged? Even though in economically backward areas Say's Law may be valid in the sense that there is no deflationary gap, it never is valid in the sense that the output of any single industry, newly set up with capital equipment, can create its own demand. Human wants being diverse, the people engaged in the new industry will not wish to spend all their income on their own products.¹ Suppose it is a shoe industry. The shoe producers cannot live on shoes alone and must depend on the exchange of shoes for the other things they need. If in the rest of the economy nothing happens to increase productivity and hence buying power, the market for the new shoe output is likely to prove deficient. People outside the new industry will not give up other things in order to buy, say, a pair of shoes every year if they do not have enough food, clothing and shelter. They cannot let go the little they have of these elementary necessities. If they *were* willing to renounce some of their present consumption in exchange for an annual pair of new shoes, these things would become available for the shoe workers to make up the balance in their consumption needs. As it is, the new industry is likely to be a failure.

The trouble is due by no means solely to discontinuities in the technical forms of capital equipment, though these will accentuate it. It is due above all to the inevitable inelasticity of demands

¹ See Paul N. Rosenstein-Rodan, 'Problems of Industrialization of Eastern and South-Eastern Europe,' *Economic Journal*, June–September 1943, p. 205.

at low real-income levels. It is in this way that poverty cramps the inducement to invest and discourages the application of capital to any single line of production. The enlargement of the market through the rise in productivity that would result from increased capital-intensity of production is inhibited by the initial smallness of the market.

The problem of technical discontinuities, in turn, is due not merely to the fact that equipment produced in advanced countries is adapted to domestic mass markets there and is not, as a rule, best suited to conditions in the poorer countries. Even if equipment were devised particularly for the latter, discontinuities would still remain. Additions to capital equipment in any case are apt to come in relatively big units, and there is especially a characteristic lumpiness in the process of investment in overhead capital facilities such as railways, power plants and water works.

While thus the technical discontinuities may call for sizable forward 'jumps' in the rate of output, the small and inelastic demand in a low-income country tends to make such jumps risky if not altogether unpromising in any given branch of business considered by itself. If, in the past, attempts at jumping forward in particular branches have for these reasons come to grief, individual enterprise is likely to take a dim view of future investment prospects; the demand for capital will be depressed.¹

We recognize, in one of its aspects, the vicious circle of poverty. We perceive a constellation of circumstances tending to preserve any backward economy in a stationary condition, in a state of 'underdevelopment equilibrium' somewhat analogous, perhaps, to the 'underemployment equilibrium,' the possibility of which, in advanced industrial countries, was impressed on us by Keynes. Economic progress is not a spontaneous or automatic affair. On the contrary, it is evident that there are automatic forces within the system tending to keep it moored to a given level.

¹ All this is superimposed on the fact that in communities afflicted with mass poverty the qualities of enterprise and initiative are usually in short supply to start with, and that the demand for capital tends to be sluggish for this reason alone. I am grateful to Mr. Robert G. Link for a detailed comment setting forth with more precision the possible ways in which the three factors—inelastic consumer demand, technical discontinuities and lack of enterprise—can keep down the demand for capital in low-income countries.

All this, however, is only part of the story. The circular constellation of the stationary system is real enough, but fortunately the circle is not unbreakable. And once it is broken at any point, the very fact that the relation is circular tends to make for cumulative advance. We should perhaps hesitate to call the circle vicious; it can become beneficent.

THE THEORY OF DEVELOPMENT AND THE IDEA OF BALANCED GROWTH

What is it that breaks the deadlock? The nations concerned need not and will not accept the state of underdevelopment equilibrium as an inexorable decree of fate. Besides, we know that in some parts of the world economic development has actually occurred; something must have happened there to break the circle. So the theory of stagnation must be succeeded by a theory of development explaining the forces that are required, or that were observed in the past, to lift the economy out of the stationary state in which it would otherwise tend to settle. As we shall see, it is scarcely possible to consider this subject without finding one's mind turning to Schumpeter's great work.

For the moment, however, let us revert to the market problem which we have just examined. The difficulty caused by the small size of the market relates to individual investment incentives in any single line of production taken by itself. At least in principle, the difficulty vanishes in the case of a more or less synchronized application of capital to a wide range of different industries. Here is an escape from the deadlock; here the result is an over-all enlargement of the market. People working with more and better tools in a number of complementary projects become each others' customers. Most industries catering for mass consumption are complementary in the sense that they provide a market for, and thus support, each other. This basic complementarity stems, in the last analysis, from the diversity of human wants. The case for 'balanced growth' rests on the need for a 'balanced diet.'

The notion of balance is inherent in the classical Law of Markets which generally passes under the name of Say's Law. Take John Stuart Mill's formulation of it: 'Every increase of

production, if distributed without miscalculation among all kinds of produce in the proportion which private interest would dictate, creates, or rather constitutes, its own demand.¹ Here, in a nutshell, is the case for balanced growth: An increase in the production of shoes alone does not create its own demand. An increase in production over a wide range of consumables, so proportioned as to correspond with the pattern of consumers' preferences, does create its own demand. It goes without saying that, with a given labour force and with given techniques and natural resources, it is only through the use of more capital that such an increase in production can be obtained.

Balanced growth may be a good thing for its own sake, but here it interests us mainly for the sake of its effects on the demand for capital. It appears in the present context as an essential means for enlarging the size of the market and of creating inducements to invest.

But how do we get balanced growth? Ordinary price incentives may bring it about by small degrees, though here the technical discontinuities can be a serious hindrance; besides, slow growth is just not good enough where population pressure exists. In the evolution of Western capitalism, according to Schumpeter's well-known theory, rapid growth was achieved through the action of individual entrepreneurs, producing recurrent waves of industrial progress. Schumpeter's *Theory of Economic Development* has commonly been treated by economists in the advanced industrial countries as a theory of business cycles. In the advanced countries there has been a tendency to take economic development for granted, as something like a natural process that takes care of itself, and to concentrate on the short-run oscillations of the economy. Schumpeter's work, properly understood, is just what its title says it is: a theory of economic development. Business cycles appear in it only as the form in which economic progress takes place.

Schumpeter's theory seems to me to provide the mould which we must use, although we may use it with slightly different ingredients. As everyone knows, this theory assigns a central

¹ J. S. Mill, *Essays on Some Unsettled Questions of Political Economy* (London School of Economics reprint, 1948), p. 73.

role to the creative entrepreneur, or rather to the action of considerable numbers of such entrepreneurs and their imitators, carrying out innovations, putting out new commodities, and devising new combinations of productive factors. Even if an innovation tends each time to originate in one particular industry, the monetary effects of the initial investment—and other circumstances as well—are such as to promote a wave of new applications of capital over a range of different industries. These waves result, in Schumpeter's own words, 'each time . . . in an avalanche of consumers' goods that permanently deepens and widens the stream of real income although in the first instance they spell disturbance, losses and unemployment.'¹

While the money-income effect of investment accounts, at least in part, for the bunching of investment activities in the course of the cycle, it is the effect of the investments on the general level of productivity that increases the flow of consumable goods and services. This real-income effect, although it may have depressive monetary repercussions in the short run, is indeed the sum and substance of long-run economic progress—provided of course that the composition of the increased consumable output corresponds, by and large, to the pattern of consumers' demands.

In our present context it seems to me that the main point is to recognize how a frontal attack of this sort—a wave of capital investments in a number of different industries—can economically succeed while any substantial application of capital by an individual entrepreneur in any particular industry may be blocked or discouraged by the limitations of the pre-existing market. Where any single enterprise might appear quite inauspicious and impracticable, a wide range of projects in different industries may succeed because they will all support each other, in the sense that the people engaged in each project, now working with more real capital per head and with greater efficiency in terms of output per man-hour, will provide an enlarged market for the products of the new enterprises in the other industries. In this way the market difficulty, and the drag it imposes on individual incentives to invest, is removed or at any rate alleviated by means of a dynamic expansion of the market through investment carried out

¹ *Capitalism, Socialism and Democracy* (3rd ed., New York, 1950), p. 68.

in a number of different industries. The rate at which any one industry can grow is inevitably conditioned by the rate at which other industries grow, although naturally some industries will grow faster than others since demand and supply elasticities will vary for different products. Through the application of capital over a wide range of activities, the general level of economic efficiency is raised and the size of the market enlarged.

The technical contribution which capital can bring about in backward countries is not in dispute. The possible increase in physical output with modern machinery, plus efficient management, may be tremendous. But this, after all, is merely the engineering side of the matter. The economic side is concerned, not simply with physical productivity, but with value productivity, and this is limited for any individual business by the poverty of potential consumers. When we think of the primitive methods of production that prevail in most countries and contrast them mentally with the physical productivity of a modern mechanized plant, we readily jump to the conclusion that the marginal productivity of capital in the economically backward areas must be enormous. The case is not so simple. The technical opportunities may be great; the physical increase in output may be spectacular compared with existing output, but value productivity is limited by the low purchasing power of the people. The technical physical productivity of capital can be realized in economic terms only through balanced growth, enlarging the aggregate size of the market and increasing individual investment incentives all round, while on any single investment project, if it were considered in isolation, the prospective return might be quite discouraging or at all events not sufficiently attractive to make the installation of more and better equipment worth while.

The notion of 'external economies' seems applicable here, though not quite in the sense in which Marshall commonly used it. Each of a wide range of projects, by contributing to an enlargement of the total size of the market, can be said to create economies external to the individual firm. Indeed, it may be that the most important external economies leading to the phenomenon of increasing returns in the course of economic progress are those that take the form of increases in the size of the market, rather

than those which economists, following Marshall, have usually had in mind (improvements in productive facilities such as transport, communications, trade journals, labour skills and techniques available to a certain industry and dependent on the size of that industry).

The external economies in the market sense, just like those of the more conventional type, can create a discrepancy between the private and the social marginal productivity of capital. The private inducement to invest in any single project may be quite inadequate because of the market difficulty, even where the marginal productivity of capital applied over a range of complementary industries, in the sense just indicated, is very considerable. This is why a wave of new investments in different branches of production can economically succeed, enlarge the total market and so break the bonds of the stationary equilibrium of underdevelopment. In the early dawn of industrial development, it takes the eye of faith to see the potential markets. Schumpeter's creative entrepreneurs seem to have what it takes, and as they move forward on a broad front, their act of faith is crowned with commercial success.

Schumpeter's theory of economic development was intended to apply primarily to the rise and growth of Western capitalism. It is not necessarily applicable in the same way to other types of society. It may be that in other types of society the forces that are to defeat the grip of economic stagnation have to be deliberately organized to some extent, at any rate initially. In the early industrial development of Japan, for instance, the state was the great innovator and the industrial pioneer on a wide front.¹ Japan's early industrial development seems to have been 'planned' and carried out in large measure by the state. Later, when the main obstacles—including the initial market difficulty—had been overcome, the state was able in many cases to turn over to private

¹ See Shigeto Tsuru, 'Economic Fluctuations in Japan 1868-93,' *Review of Economic Statistics*, 1941. The point has been made by a number of other writers. Japan's experience in this respect is well summarized by Joseph J. Spengler: 'The government . . . offset the lack of an adequate entrepreneurial class by performing many of the functions of this class and facilitating the accomplishment of others through the use of appropriate monetary, fiscal, and related policies.' ('Economic Factors in the Development of Densely Populated Areas,' *Proceedings of the American Philosophical Society*, February 1951, p. 44.)

hands the projects it had started. Incidentally, it appears that Japan's early industrial development, before 1914, was based predominantly on an over-all expansion of the domestic market. It was not until later that export markets became important for Japanese industry.

Whether the forces of economic progress are to be deliberately organized or left to the action of private enterprise—in short, whether balanced growth is enforced by planning boards or achieved spontaneously by creative entrepreneurs—is, of course, a weighty and much debated issue. But from our present viewpoint it is essentially a question of method. I feel no need to enter into it at length. We are here concerned with the economic nature of the solution, not with the administrative form of it. Whichever method is adopted, the nature of the solution aimed at may be the same. And the 'miscalculation' Mill warned against (in the passage quoted earlier) seems hard to avoid in either case. Experience has certainly shown that large-scale public investment plans, in their practical execution, if not in their conception, often have a tendency to develop a marked lack of balance. But disproportionalities of one kind or another have also been a feature of the cyclical booms through which economic progress was achieved by private enterprise.

The nature of the solution is what I have tried to indicate. The question of method must be decided on the ground of broader considerations; on the ground, especially, of the human qualities and motive forces existing in any particular society. The economist, as an economist, has no categorical imperatives to issue on this subject. One of the founding fathers of nineteenth-century liberalism, Jeremy Bentham himself, maintained an attitude of relativity in this regard. 'Whether government should intervene, says Bentham, should depend on the extent of the power, intelligence, and inclination, and therefore the spontaneous initiative, possessed by the public, and this will vary as between countries.'¹ For various reasons, some of which could probably be fairly clearly defined, the American economy has been abundantly

¹ Jacob Viner, 'Bentham and J. S. Mill: The Utilitarian Background,' *American Economic Review*, March 1949, p. 371. Bentham adds this illustration: 'In Russia, under Peter the Great, the list of *sponte acta* being a blank, that of *agenda* was proportionally abundant' (Viner, *ibid.*).

supplied with the human qualities of enterprise and initiative; but we cannot take it for granted that they are present in the same degree elsewhere. In the industrial development of Western Europe the main source of these qualities was the middle class. In the United States this label, if applicable at all, might be said to cover the great bulk of the people, while in many of the backward countries to-day the middle class is virtually non-existent.¹

DETERMINANTS OF THE SIZE OF THE MARKET

We have already observed that the deficiency of market demand that tends to keep down private investment incentives in the domestic economies of underdeveloped countries is a deficiency of real purchasing power, in terms of classical economics. It is not a deficiency of 'effective demand', in terms of Keynesian economics. There is, as a rule, no deficiency of monetary demand; there is no deflationary gap. On the contrary, many of these countries suffer from a chronic inflationary pressure. Money demand, though low in absolute amount, is excessive in relation to the capacity to produce. Supply creates its own demand, yes; but supply is very small. There is a shortage of demand in the fundamental classical sense of supply to offer in exchange in the market. This supply is small because of low productivity, which in turn is largely due to the lack of real capital. There is little or nothing in this state of affairs that can be remedied by monetary expansion. Supply in poor agricultural countries being inelastic as well as small, monetary expansion leads merely to price inflation. The fundamental market deficiency as a deterrent to private capital investment remains completely unchanged. Monetary policy, though it may have other important functions, is not one of the main determinants of the size of the market in the sense in which we have discussed it.

¹ Joseph J. Spengler sums up these matters judiciously: 'Industrial progress is markedly dependent upon (a) the relative number of imaginative and energetic innovators and entrepreneurs present in the population, (b) the extent to which these qualified persons are empowered to make and execute relevant decisions, and (c) the degree to which these individuals are free of hampering legal and institutional arrangements. In the past this distribution has been most favourable in countries possessing a comparatively strong "middle class" that enjoyed sufficient support at the hands of the state; while countries lacking a sufficiently strong middle class have had to depend upon the state to provide entrepreneurial leadership in so far as possible' (op. cit., p. 22).

Nor is the number of a country's inhabitants a basic determinant in this sense. A country with a large population will have only a small total capacity to produce if its people have a low productivity per head. Size of population can affect the average level of productivity only in so far as the notion of an 'optimum population' is valid. And even if a country with a large population does produce a sizable aggregate output, this still does not mean that it constitutes a coherent market. There is the cost of transportation to be considered. But this factor, too, should not be considered alone. It has too often been picked out for almost exclusive attention (owing, no doubt, to its historical importance in a crucial period of economic expansion).

There is indeed a common misconception which tends to interpret the size of the market in the present context solely in terms of physical area, and which accordingly places a quite disproportionate emphasis on the cost of transporting goods. It is true that with given population density and productivity per head, improvements in transport will increase the physical extent as well as the economic size of the market. But physical extent and economic size are not identical. The latter depends on the efficiency, not only of transportation, but of production generally, even though it can readily be admitted that transport facilities do play a quite special role in economic development.¹

Improvements in transport are important; so are reductions in tariff barriers and other artificial obstructions to the movement of goods. A recent United Nations report expresses the opinion that 'some underdeveloped countries are so small that their internal market is not large enough to support large-scale industries,' and proposes as a remedy the creation of preferential tariff

¹ Some confusion on this point may be due to Adam Smith, who, in expounding his great thesis that 'the division of labour is limited by the extent of the market', discussed, in the main, the market's geographical area and concentrated almost exclusively on the benefits of cheap transport (in particular, 'water carriage'). He realized that the division of labour was intimately bound up with the application of capital to the processes of production. When he said, in effect, that the application of capital was limited by the size of the market, he pointed to a fundamental and important truth. But it was not quite the whole truth. Smith was not equally clear about the other side of the matter, namely, that the extent (i.e., size) of the market depends, in turn, largely on the division of labour (i.e., on the application of capital). Instead he emphasized transport facilities as the determinant. He shunned the circular relation and presented a straightforward linear sequence of causation.

systems, customs unions or even political federations among such countries.¹ If this were the real solution of the market problem, it would be relatively easy—a matter merely of legislation or government decree in a group of neighbouring countries; no great demands would be placed on the state.

The main trouble, however, is not that countries are too small but that they are too poor to provide markets for local industries. If Ecuador had the same level of productivity as Sweden or Switzerland, its domestic market would be sufficient to offer incentives for private investments of various kinds. As it is, it is not. Certainly, to remove trade restrictions with neighbouring countries would not be an entirely useless gesture. Something may be gained by combining Ecuador into a single customs area with Colombia, Peru and Venezuela, so as to remove the bad effect of the artificial transport cost which customs duties represent. But can this be the real answer to the problem of economic development? Even with no trade restrictions, there would still remain the physical transport costs and, above all, the low general level of productivity.

Tariff barriers can be regarded as artificial transport costs. Reductions in transport costs, whether natural or artificial, do produce an increase in the size, as well as in the geographical extent of the market. But reductions in any cost of production, not only in that of transport, have that effect. Any increase in economic efficiency—not only in the efficiency of transportation—increases the size of the market in the way already indicated. Adam Smith had good historical reasons for his emphasis on transport facilities, and one can think of theoretical reasons as well. I would not deny for a moment the benefits of cheap transport and free trade. But to single out transport costs—natural or artificial—and to speak of the territorial extent of the market as the main or the sole determinant of its size, seems to me a case of misplaced emphasis (due, perhaps, to the common penchant for 'misplaced concreteness').

China, one of the poorest countries in the world, used to have

¹ *Measures for the Economic Development of Underdeveloped Countries*, Report by a Group of Experts appointed by the Secretary-General of the United Nations, May 1951, p. 23.

a system of internal customs duties, called 'Likin,' which had to be paid whenever goods were moved from one province to another. While their main purpose was revenue collection, there is no doubt that these duties acted effectively as interregional tariff barriers. In 1928 this system was abolished. China became, from the point of view of commercial policy, a 'single market'—one of the world's largest national markets in area as well as in numbers of people. Yet China remained one of the poorest countries in the world.

Those who point to the absence of internal trade barriers within the United States as an example for other parts of the world, stress what seems to me a secondary rather than a primary foundation of American prosperity. A primary foundation is the American level of productivity, due largely to the tremendous equipment of capital used in production. This is what constitutes the chief basis of the American mass market and of American mass production. Mass production, incidentally, would not be possible if it did not mean production for the masses. Economic development in the United States has made more and better goods and services available to the mass of people, including especially the lower income groups. Most of the things that are now generally regarded as characteristic of the American standard of living are to be found among the lower income groups in the United States. They are articles not only of mass production but also of mass consumption, thanks to the high productivity of the American worker; thanks largely to the fact that he is so well equipped with capital instruments, plant and machinery of all kinds. This is what seems to me the primary determinant of a mass market.

BALANCED GROWTH AND INTERNATIONAL SPECIALIZATION

The limited size of the market in economically backward areas has important effects on the volume of international trade, on the pattern of foreign investment, and on the use of domestic savings. Each of these topics calls for some comment.

The size of the market is a basic determinant, not only of the incentives for the employment of capital, but also of the volume of international trade. Because of their low level of productivity

and hence of real purchasing power, the backward agricultural countries play, as is well known, a minor part in world trade; by and large, the advanced industrial countries are each others' best customers.¹ The main influence of Keynesian economics on the theory of international trade was to stress the fact that the volume of trade among the industrial countries is closely dependent on the state of employment and effective demand in these countries, and that one cannot expect foreign trade to be active if the domestic economies are depressed. This was a good point to stress, but it is not the most fundamental. A more important determinant of the volume of international trade in the long run is the 'size of the market' and the level of productivity. Balanced growth, as a means of enlarging the market and stimulating the incentives for higher productivity through capital investment, is an essential basis for expanding trade.

Yet the case which the poor countries advance in favour of the 'balanced growth' and 'diversification' of their domestic economies is not always well received. Does it not mean turning away from the principle of comparative advantage? Why do these countries not push their exports of primary products according to the rules of international specialization, and import the goods they need for a 'balanced diet'? Very briefly, the answer is: because the notion of balance applies on the global scale as well. For fairly obvious reasons, expansion of primary production for export is apt to encounter adverse price conditions on the world market, unless the industrial countries' demand is steadily expanding, as it was in the nineteenth century when both population and productivity in Western Europe were growing rapidly, when synthetic substitutes for crude materials had not yet been discovered, and when Great Britain decided to abolish tariff protection and thus to surrender some of her own agriculture in the interests of international specialization. In the present century conditions have changed. There has been some sluggishness in the industrial countries' demand for primary products, and despite the recent raw-material boom there is no certainty that this sluggishness is gone for good.

¹ See Folke Hilgerdt's illuminating study, *Industrialization and Foreign Trade* (League of Nations, 1945).

To push exports of primary commodities in the face of an inelastic and more or less stationary demand would not be a promising line of long-run development. If it is plausible to assume a generally less than unitary price elasticity of demand for crude foodstuffs and materials, it seems reasonable also to conclude that, under the conditions indicated, economic growth in underdeveloped countries must largely take the form of increased production for domestic markets. (Whether these conditions will prevail in the future is a question of forecasting, into which we need not enter). Under these conditions, if there is to be any development at all, it must concentrate at least initially on production for local requirements; and so long as this development increases the level of productivity and hence of real purchasing power, it will tend in the long run to help rather than hinder the growth of international trade.

These are some of the considerations that explain the widespread desire for 'balanced growth' and provide some economic justification for it. They do not constitute a case for autarky. The scale of comparative advantage is subject to change. Rash conclusions are sometimes drawn from static analysis. Underdeveloped countries endeavouring to build up industries producing for their own market are often regarded as moving towards a state of self-sufficiency. But the size of the market is not fixed. When, for example, a country that consumes annually a certain number of shoes (our favourite commodity), all of which it imports, decides now to set up a domestic shoe industry producing just that number a year, it seems natural to conclude that it is making itself self-sufficient in shoes. But if the new shoe industry is part of an over-all process of growth, the market for shoes in that country may increase ten-fold, so that its shoe imports are increased instead of cut down to nothing. In Canada, for example, textile manufacturing was one of the first industries to develop, with the aid of tariff protection from 1879 on; yet Canada to-day is one of the world's biggest importers of textile manufactures.

As productivity increases and the domestic market expands, while the composition of imports and exports is naturally bound to change, the total volume of external trade is more likely to grow than to shrink. But even if it remains the same there is not

necessarily any harm in 'balanced growth' on the domestic front. Take a country like Venezuela; petroleum accounts for 90 per cent of its exports, but employs only about 2 per cent of its labour force; the majority of the people work in the interior for a precarious subsistence in agriculture. If, through the introduction of capital and increased productivity, the domestic economy were to expand so that people working formerly on the land alone would now supply each other with clothing, footwear, houses and house-furnishings as well as food products, while all the time petroleum exports remained the same and imports likewise constant in total volume, nothing but gain would result to the inhabitants without any loss to the outside world. No doubt there would be a fall in the proportion of foreign trade to national income. But could it not be that this proportion, in the many 'peripheral' countries of this type, has been kept unduly high in the past, simply by the poverty of the domestic economy?

The characteristically important role which international trade played in the world economy of the nineteenth century was partly due to the fact that there *was* a periphery—and a vacuum beyond. The trade pattern of the nineteenth century was not merely a device for the optimum allocation of a given volume of resources; it was, as D. H. Robertson put it, 'above all an engine of growth,'¹ but of growth originating in and radiating from the early industrial centres. Even in the United States we have been so accustomed to regard the early nineteenth-century pattern as normal that we seldom stop to notice that the economic development of the United States itself has been a spectacular departure from it.

With the spread of industrialization we have, however, noticed that the major currents of international trade pass by the economically backward areas and flow rather among the advanced industrial countries. 'Balanced growth' is a good foundation for international trade, as well as a way of filling the vacuum at the periphery.

¹ 'The Future of International Trade,' *Economic Journal*, March 1938, p. 5 (now reprinted in *Readings in the Theory of International Trade*, edited by H. S. Ellis and L. A. Metzler, Philadelphia, 1949).

THE TRADITIONAL PATTERN OF FOREIGN INVESTMENT

The inducement to invest is limited by the size of the market. Our general discussion of this theme is directly applicable to the field of international investment.

Why is it that private business investment abroad has tended in the past—in the last few years as well as in the nineteenth century—to shy away from industries working for the domestic market in underdeveloped areas and to concentrate instead on primary production for export to the advanced industrial centres? There is little doubt that such a tendency has existed and still exists. Some illustrations of it will be given in Chapter IV. American direct investments abroad certainly conform to this pattern. In economically backward countries, they work mostly in extractive industries—oil fields, mines and plantations—producing for export markets; only in the more advanced areas (Canada and Western Europe) do they, significantly, show any great interest in manufacturing for local consumption. The fact that foreign investment often constitutes merely an outpost of the advanced creditor economy, to whose needs it caters, was noticed by J. S. Mill¹ and stressed more recently by J. H. Williams.²

Dr. H. W. Singer of the United Nations Secretariat takes it as the basis for his criticism of the 'traditional' type of foreign investment.³ According to him, foreign investment was foreign only in a geographic sense; it formed essentially a part of the creditor country's economy; it did little or nothing to promote—and, on occasion, may even have impeded—the economic development of the debtor countries.

Personally I find these generalizations a little too sweeping. In the first place, they seem to me to apply only to a part—and, as we shall find, a minor part—of international investment in the century before 1914. Private foreign loans to governmental authorities and public utility undertakings were very considerable; and the largest single form of British foreign investment in the

¹ *Principles of Political Economy*, Book III, chap. 25, sec. 5.

² 'The Theory of International Trade Reconsidered,' *Economic Journal*, June 1929 (reprinted in *Readings in the Theory of International Trade*, op. cit.)

³ 'The Distribution of Gains between Investing and Borrowing Countries,' *American Economic Review, Papers and Proceedings*, May 1950.

years 1870–1914 was investment in railway securities, which unquestionably provided a useful foundation for the general development of the borrowing countries.

Secondly, I am inclined to believe that even in the case of the so-called 'colonial' type of foreign investments—that is, foreign-owned extractive industries working for export to the industrial countries—various direct as well as indirect benefits were likely to develop, contributing gradually, even if only as a by-product, so to speak, to the growth of the local economy.

Be that as it may, it does seem true to say that, on the whole, foreign entrepreneurial investment in underdeveloped countries (that is, 'direct' as distinct from 'portfolio' investment) has shown a preference for activities connected with exports of primary products to advanced countries and an aversion from activities catering to the domestic markets of the debtor countries. But this, after all, is merely a statement of fact. What is the explanation of it?

The general reluctance of private business capital to go to work for the domestic markets in the less developed countries, in contrast with its eagerness in the past to work there for export to the industrial creditor states, does not reflect any sinister conspiracy or deliberate policy, still less any concerted attempt of the rich countries to exploit the poor. Exploitation there may have been, but this pattern of foreign investment by itself does not constitute any proof of it. This pattern can be readily accounted for on obvious economic grounds. There is nothing sinister about it. The explanation lies, on the one hand, in the poverty of the local consumers in the underdeveloped countries, and on the other, in the large and, in the nineteenth century, vigorously expanding markets for primary products in the world's industrial centres.

In these circumstances it was natural for foreign business investment to serve merely as projections of the industrial creditor countries for the purpose of meeting the needs of these countries through cheap foodstuffs and raw materials. The incentive to invest was created by the investing countries' own demand for the primary commodities which they required. As a result a somewhat lop-sided pattern of development in the peripheral areas was

inevitable. To the extent that the industrial countries' demand for primary products has in recent decades become less buoyant than it was in the nineteenth century, even this traditional type of foreign entrepreneurial investment may have lost some of its economic basis.¹

There never was much inducement for foreign business capital to go to economically backward areas to work for the local markets there; these markets were too small to provide an incentive. Private investment generally is governed by the pull of market demand, and international investment on private business account is no exception to this.

The weakness of the market incentive for private investment in the domestic economy of low-income countries can affect domestic as well as foreign capital. It may help in some measure to account for a common observation about the use of domestic savings in such countries. The first difficulty is, of course, that the volume of domestic saving is small, because of the low level of income. But then there is the further trouble that such saving as does take place tends to be used unproductively: it tends to be put into real estate, gold, jewellery, commodity hoards and hoards of foreign or domestic currency.² This unfortunate tendency is usually explained by reference to inadequate financial organization or lack of education. While such institutional explanations undoubtedly have some validity, I suspect that this tendency may also reflect a more deep-seated economic condition: namely, the deficient inducement to invest, due to the poverty of the domestic market.

Private investment is attracted by markets. A particular instance of the relation between investment incentives and market demand appears in our old friend, the Acceleration Principle. The relation holds in space as well as in the time dimension. The conventional theory of factor proportions and capital movements is that in countries where there is little capital in relation to land

¹ Cf., Royal Institute of International Affairs, *The Problem of International Investment* (London, 1937), p. 14.

² Obviously it makes a great difference whether it is domestic or foreign currency that is hoarded. Hoarding of domestic currency represents saving that can be made available for domestic investment through a corresponding dose of credit expansion. Hoarding of foreign currency, by contrast, is saving exported, and represents a real drain on the country's economy.

and labour, the marginal productivity and hence the yield of capital will be high, and that, if it were not for risk and other extraneous impediments, capital would move to these countries from the areas where it is relatively abundant. This view is clearly subject to a qualification. It may be that the high potential yield of capital in capital-poor areas can be realized only through investment undertaken simultaneously in a number of complementary industries (or, what may be most important, in public overhead facilities that serve to raise productivity over a wide field). A balanced increase in production creates external economies in the form of enlarging the size of the market. As we have seen, there is on this account as well as for other reasons a possible discrepancy between the private and the social marginal productivity of capital. The marginal productivity of capital in the poor countries, as compared with the rich, may be high indeed, but not necessarily in private business terms.

Even if we abstract from political and other risk factors, there is no guarantee, therefore, that the motives that animate the individual businessman will automatically set in motion a flow of funds from the rich to the poor countries. They may, on occasion, induce 'perverse' flows from capital-poor to capital-rich countries, if private investment incentives are depressed in the former by the lack of consumer buying power and spurred in the latter by the existence of a prosperous mass market. Thus the high level of business profits in the United States in recent years is said to have been an important obstacle to the outflow of American business capital.¹

¹ See Sir Arthur Salter, *Foreign Investment* (Essays in International Finance. Princeton, 1951), p. 36. All this fits in with the conclusion reached by John H. Williams: 'As regards American investment, it is quite unlikely that the main reliance can be on private foreign investment. A part of our puzzle has been that while the role we should play in the world is that of creditor country, the conditions are often more favourable for investment here, not only for Americans but for others. The history of the inter-war period is full of perverse capital movements of this kind, which disturbed rather than restored international equilibrium.' ('International Trade Theory and Policy: Some Current Issues,' *American Economic Review*, Papers and Proceedings, May 1951, p. 425). While I still feel that the disequilibrating capital movements of the inter-war period were due largely to political fears, speculation regarding exchange rates and other 'abnormal' factors described in *International Currency Experience* (League of Nations, 1944, it seems likely that they were based in part also on the perfectly 'normal' play of private profit incentives.

On the other side, it is true that business profits sometimes appear to be high in underdeveloped countries, even in industries working for the home market. But this does not necessarily upset the hypothesis I have put forward. High business profits in these countries may reflect the high marginal productivity of capital that can be realized through an over-all expansion of the market, and some countries, though still backward, are in process of expanding their domestic economy. Even in the absence of development, however, profits may be high, partly because they may represent rewards of entrepreneurial and management services, which are very scarce factors in these countries and command a high price; and partly because they may include illusory inventory profits and profits due to failure to provide for fixed capital replacement, which are so common under inflationary conditions.

The doctrine of balanced growth leaves plenty of room for international investment, but it does reveal limits to the role of direct business investment. A private investor may not have the power, even if he had the will, to break the deadlock caused by low productivity, lack of real buying power and deficient investment incentives in the domestic economy of a backward area. It is the size of the local market that explains why American direct investments in manufacturing industries abroad have gone mostly to Western Europe and Canada, where industry has already been quite highly developed, and why they have tended to keep away from the industrially backward countries (see table, p. 84 below). It looks as if foreign business capital followed the rule that 'to those who have shall be given.' But this is not at all surprising. It is just another reflection of the general circular constellation of the forces affecting the accumulation of capital for economic development.

All this applies to direct entrepreneurial investment. Even in the heyday of private capital movements, however, this type of investment was only a part of the total international flow of funds. Private foreign loans for financing expenditures by public authorities were an important form of international investment. The greater part of British capital exports in the period 1870-1913 was in the form of fixed interest-bearing securities.¹ Overseas

¹ J. S. Pasmazoglu, 'Some International Aspects of British Cyclical Fluctuations, 1870-1913,' *Review of Economic Studies*, 1949-50, p. 120.

government bonds and railway securities together represented about two-thirds of total international investment in this period, and in addition there were other assets of a public-utility character (port facilities, gas and water works, electric power plants, etc.). This does not leave any major proportion for ventures of the 'colonial' type—that is, foreign-owned mines and plantations producing for the creditor countries—which can therefore scarcely be regarded as typical of nineteenth-century foreign investment as a whole.

Capital outlay by public authorities financed from private, or for that matter public, foreign funds can be called 'autonomous' investment, since it does not depend closely, if at all, on the state of market demand. By contrast, direct business investment must be classed predominantly as a form of 'induced' investment, since it generally has to be induced by tangible market demand already existing or visibly coming into existence. Thus the general distinction between autonomous and induced investment, which has become familiar in business-cycle literature, seems to me to be applicable in a certain sense to the case of international investment as well, though here as in business-cycle theory the distinction is not absolute, but is essentially a matter of degree.

International investment on private business account is attracted by markets. In the poorer countries, which had no internal markets to speak of, only the markets for export to the great industrial centres could provide any strong investment incentives. Foreign business enterprise tended accordingly to concentrate on extractive industries working for export. In my opinion the trouble about foreign investment of this 'traditional' sort is not that it is bad, or that it does not tend to promote development generally; it does, although unevenly and indirectly. The trouble is rather that it simply does not happen on any substantial scale, unless world demand for primary products is greatly and steadily expanding, as it was in the nineteenth century. We shall return to this problem once more.

The difficulty we have examined relates mainly to direct entrepreneurial investment, or 'induced' investment, for which market demand is a prior causal condition. Clearly the market

difficulty does not, or need not, affect the autonomous type of international investment. I must hasten to add that 'autonomous' international investment, though it may be free from the handicap that cramps private business capital in poverty-stricken areas, is subject to certain difficulties and limitations of its own. But these have nothing to do with the topic we have been considering. They will come up for discussion in Chapter IV.

Let me sum up our present theme. In his criticism of the 'traditional' type of foreign investment, H. W. Singer points out that, as a result of the past pattern of investment, 'the export industries in underdeveloped countries, whether they be metal mines or plantations, are often highly capital-intensive,' whereas 'by contrast, production for domestic use, especially of food and clothing, is often of a very primitive subsistence nature.'¹ In so far as this generalization is valid—and I do believe that it has some descriptive validity—there could be no better confirmation of the importance of the size of the market in relation to the inducement to invest. It strongly supports the thesis with which I started, namely, that there is a possible deficiency on the demand side of the problem of capital formation in under-developed areas.

It is clear, however, that this deficiency arises only on the private business level of individual investment incentives in low-income areas. For the economy as a whole there is of course no deficiency in the demand for capital in an underdeveloped country. In this respect the trouble on the demand side is different from that on the supply side of the problem of capital formation. Any failure of the demand for capital can be cured or offset by deliberate measures of organization, including measures designed to close the gap that may exist between the private and the social marginal yield of capital. Surely it must be possible either to make the social demand for capital effective in private business terms or else to exercise it directly through public investment. Once there is awareness of the problem, it should not be too difficult, in my opinion, to devise remedies suited to local conditions.

There is no suggestion here that, by taking care of the demand side alone, any country could, as it were, lift itself up by its bootstraps. We have been considering one particular facet of our

¹ Op. cit., pp. 473-44.

subject. The more fundamental difficulties that lie on the supply side have so far been kept off-stage merely for the sake of orderly discussion.

Capital formation requires an act of investment as well as a capacity to save. The two things can and should be distinguished, at least for purposes of analysis. Having examined the problem of investment incentives—which though troublesome is obviously not insuperable—I shall devote the following chapters to the more serious problem of the supply of capital required for economic development.