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## The Role of Agriculture in Economic Development

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## THE CONTRIBUTION OF FOREIGN AND INDIGENOUS CAPITAL TO ECONOMIC DEVELOPMENT

#### Ι

OUR thinking about the role of indigenous and foreign investment in the development of relatively backward economies is necessarily coloured by the conclusions we draw from past experience. I propose, therefore, to begin by reviewing that experience, if only to show that it is much less relevant to present-day problems than is generally imagined.

One feature of nineteenth-century international capital flows that has impressed itself strongly on the popular mind is their scale. It is a common belief that capital transfers were once a larger element in the international economy than at present and made a more significant contribution to world economic development. This belief seems to derive from a contrast between British investment fifty years ago and American investment today and from a further contrast between the apparent ease with which the countries that have succeeded in industrializing themselves obtained the necessary finance and the difficulty in raising capital abroad experienced by countries that are now seeking to industrialize themselves.

The first of these contrasts is well founded so long as our attention is confined to the proportion of domestic savings invested abroad by Britain and the United States, without regard to the investment opportunities to which the flow of capital was a response. In the forty years between 1875 and 1914 about two-fifths of all additions to the stock of capital owned in the United Kingdom consisted of investments abroad.<sup>1</sup> There were years when more than half of current British savings went to the finance of foreign assets. It is unimaginable that what was then true of the United Kingdom could now apply to the United States. To yield such a result, the flow of investment from the United States would require the entire Marshall Plan to be carried out at least thrice a year.

<sup>1</sup> A. K. Cairncross, Home and Foreign Investment, 1870-1913 (Cambridge, 1953), p. 4.

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If instead of comparing the leading creditor countries in the two periods we compare the flow of capital with the flow of trade, there is less reason to suppose that foreign investment (although it may have altered in character) is now on a relatively smaller scale. World trade, to take visible items only, has grown fivefold since 1013 (at current prices) and international investment, including grants and all capital transfers other than repayments, has probably grown in roughly the same proportion. British foreign investment in 1913 came to roughly \$1 billion and other countries may have been investing, at a guess, a further \$1 billion. In 1958 the balance of payments of the non-industrial countries (as defined by G.A.T.T. so as to exclude the Communist bloc, the main petroleum exporters and most of the overseas members of the French Community but to include Australia, New Zealand and the Union of South Africa) showed a deficit of nearly \$6 billion on income account.<sup>1</sup> There was, in addition, considerable investment in some of the industrial countries such as Canada, and the non-industrial countries excluded from G.A.T.T.'s total. We cannot be very far out if we put the current flow of international investment (including aid) at \$10 billion. This would give a fivefold increase since 1913 (if the guess for non-British investment is reasonable) or exactly the same as the increase in trade.

More significant, however, is the change that has taken place in the flow of capital to the less-advanced countries. International investment before 1914 was heavily concentrated in countries that were either already regarded as advanced or would not be reckoned today as 'less advanced'. Relatively little British capital, for example, went to Asia (India, China and Malaya apart) or to Africa (with the exception of Egypt and South Africa); other capital-exporting countries also tended to avoid those continents. Even if we include Latin America, it is unlikely that the less-advanced countries as a group obtained more than about \$500 million a year in foreign capital in the decade before 1914 when the international flow of capital was at its tide. Whatever the exact figure, it was plainly far below the current rate of capital transfer to those countries today.

Nor is it true that over the past two centuries heavy recourse to foreign borrowing has been a normal, or indeed an inevitable, feature of the transition from a pre-industrial to an industrial society. The contribution made by foreign capital to the economic development of different countries shows great diversity. In general, however, this

<sup>&</sup>lt;sup>1</sup> International Trade 1959 (Geneva, 1960), p. 42.

contribution has been, if not negligible, far smaller in amount than the contribution made by domestic savings. Although it is rarely possible to make exact comparisons, there is little doubt 'the great bulk of the savings needed for growth and industrialization were generated inside each country'.<sup>1</sup>

The United Kingdom, for example, although possibly assisted at first by some Dutch investment in government stock, was a net exporter of capital from the late eighteenth century onwards. France and Germany borrowed abroad in the early stages of industrialization but not on any large scale and mainly to finance railway-building. There was also some direct investment, especially by British entrepreneurs, in these and other European countries, but this investment, although of importance because of its impact on local industry, did not give rise to any large-scale transfer of capital. Of the Scandinavian countries, Finland borrowed little; Denmark only changed from being a net lender to a net borrower after industrialization was already well advanced; Swedish borrowing, although heavier and extending over a longer period, also came relatively late; and Norway borrowed most of all. The Norwegian Government issued bonds abroad from the middle of the century onwards, first for the modernization of agriculture and later for railway-building, while private investment moved into mining, pulp and paper and hydroelectric schemes. The largest borrower in Europe was Russia; like most continental countries she imported capital for railway-building-mainly in the sixties and seventies-while later investment tended to be in industry, including textiles, mining, steel and oil.<sup>2</sup>

All these countries, except perhaps Norway and Russia, generated within themselves nearly the whole of the savings needed for their industrialization. It was probably exceptional in Europe for foreign borrowing to exceed, even for a few years, one-fifth of net domestic investment. This does not mean that foreign investment did little to change the course of events; its significance lay not so much in the proportionate addition to domestic savings which it yielded as in its impact on the sectors of the economy that were critical to further growth.

Transport took the lion's share of foreign capital, and transport was often difficult to finance through domestic financial institutions.

<sup>&</sup>lt;sup>1</sup> K. Berrill, *Foreign Capital and Take-off*, p. 2. (Paper delivered at the Conference of the International Economic Association at Konstanz, September 1960.)

<sup>&</sup>lt;sup>2</sup> For a useful summary, on which I have drawn above, see Berrill, op. cit.

A reduction in transport costs through railway-building widened the domestic market, improved mobility and assisted that permeation of the economy with modern ideas that lies at the root of continuing development. Similarly in industry, foreign enterprises provided a model to be copied and improved upon, a market to be supplied and a training ground for labour and management alike. The external economies flowing from these investments, and the changes in production functions to which they led, were of a different order of importance from the direct returns on the investments themselves. They jolted the economy on to a new path which it would not otherwise have followed.

In other continents there was just as great diversity in the part played by foreign investment as in Europe. The United States was by 1914 the largest single debtor in the world; but in comparison with her own enormous resources her debts were almost negligible and within the space of the First World War, although herself a belligerent, she became a net creditor. In the early stages of industrialization in the nineteenth century she imported comparatively little capital and even when the inflow was at its peak in the railway-building after the Civil War it never amounted to more than a small fraction of total investment. Japanese foreign borrowing was insignificant throughout, apart from a short burst after 1903 mainly to pay for the war with Russia. In Canada, Australia and New Zealand, on the other hand, foreign capital played a much larger part and there were times when, as happened in Canada just before the First World War, it financed half the net domestic capital formation. Even in those thinly populated countries, however, the *average* contribution made by foreign capital over the years of railway-building was much lower.

While foreign investment undoubtedly speeded up the development of those countries, it is more accurate to think of it as accompanying and reinforcing their growth than as preliminary to it. There were bursts of heavy investment, especially in railways, when the economy was expanding, and this investment contributed to further growth. But the foreign investor did not usually join in until comparatively late in the day, lagging behind rather than running in front. Railway networks, for example, were not built at one go, but were enlarged and articulated in spurts when conditions were propitious: when existing line capacity was under pressure, rolling stock was insufficient, extensions and new branch lines seemed likely to pay, and the foreign investor was in a confident mood. As one might

expect, it was a rapid growth in output, more than anything else, that created a shortage of capital—including public utility capital—and made it necessary to have recourse to foreign borrowing.

The countries that made most use of foreign capital in those days were in many ways an unusual group. They were either newly settled countries—chiefly in the Western Hemisphere or in Australasia or countries well above the level of subsistence like those of Western Europe in the early stages of industrialization, or very large countries like Russia, China and India. Most of the capital invested was transferred from European countries to countries inhabited or governed by Europeans. There were large and obvious investment opportunities; these opportunities could easily be conveyed to foreign investors; and usually, although by no means invariably, the confidence of those investors was not seriously weakened by the nationality of the borrower.

The newly settled countries had particularly large requirements for capital; but they could offer excellent security in the shape of a rapidly expanding market to the very country from which they were most anxious to borrow. They had little need to trouble over possible transfer difficulties or about convincing the investor that they were genuine low-cost areas; the British investor had only to study the trade returns to satisfy himself on both points. He was well aware after 1870 of the large cost-differentials in agriculture in favour of the areas in which he was investing, of the power of railway transport to revolutionize an economy—at least two-thirds of British foreign investments went directly or indirectly into railways—and of the increasing needs of the British market for imports of primary produce. The harmony of interests between lender and borrower could hardly have been closer.

In Western Europe this harmony was less pronounced. Whether one looks at the investments made by continental countries outside the area or at the investments which they made in each other, the interrelation of capital and commodity flows was less close and the stimulus to primary production less conspicuous. Some of the investments—e.g. those made by France in Russia—had a marked political flavour. Others were more akin to modern direct investment in foreign subsidiaries.

On the Continent, as in most of the newer countries, the borrowing country generally shared the outlook and institutions of the lending country, or was at least not widely separated by a different social and

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political tradition. It may be true that capital tended to flow from the more-advanced to the less-advanced countries; but the difference in levels of development was far narrower and more exclusively economic than it is today between industrial countries and those that have hardly begun to industrialize themselves. This meant, amongst other things, that indigenous investment was far from negligible, that financial institutions for the mobilization of domestic savings either already existed or could easily be created, and that the organizational and entrepreneurial obstacles to development were easily surmounted. It was also possible to predict with fair confidence that the path of development would be roughly parallel to that followed in the leading country, not only in respect of industrial growth, urbanization, the emergence of a wage-system and so on, but also in much more farreaching directions such as the movement of birth-rates and savings ratios, the evolution of tax policies and the behaviour of governments.

There were other important peculiarities of foreign investment in those years. It was almost entirely financed by private investors or financial institutions, very rarely by governments.<sup>1</sup> Thus it was controlled by the private advantages which it offered in the form of interest, dividends and security of capital, not, as a rule, by considerations of national policy. It was financed through the capital market rather than through the reinvestment of profits, the acquisition of subsidiary companies and other forms of direct investment; and what passed into the portfolio of investors usually consisted of bonds issued by governments or public utilities, particularly railways. The international capital market was adapted to the handling of large bond issues by known borrowers; this meant in practice either governments or large public utilities rather than borrowers from agriculture, industry and commerce. The amounts required by the latter group were too small, the reputation of the borrower too local, and the variability of the return too great, to allow of large bond issues in a foreign capital market. Then, as now, the individual firm in those sectors depended mainly on domestic capital, whether raised on the Stock Exchange or from institutional lenders or accumulated out of past profits.

It has been estimated, for example, that out of total British foreign investments of  $f_{,4,000}$  million in 1913, some  $f_{,500}$  million consisted of

<sup>&</sup>lt;sup>1</sup> Except perhaps in Africa where, of the total capital invested from 1870 to 1936, nearly one-half was supplied by governments or public authorities (S. H. Frankel, *The Economic Impact on Under-developed Societies* (Oxford, 1953), p. 131.

direct investments (tea and rubber plantations, tramway undertakings, branches of British firms, &c.). On the other hand, of total private U.S. foreign investments of \$44.8 billion in 1959, no less than \$30.0 billion represented direct investments. Portfolio investment by private investors has lost its former importance and has changed in character, far more of the holdings of investors being in foreign equities rather than in bonds. At the same time, the capital required by public utilities has tended to be supplied to a much greater extent by governments or by international agencies such as the World Bank. Direct investments, on the other hand, have been principally in industry and have risen largely through the reinvestment of profits by the branches of foreign concerns. Thus transport and power are financed either from local sources, from grants and governmental loans, or by the World Bank, while industry has been increasingly financed from abroad as a result of the emergence of the international firm. The typical (private) foreign investment of the nineteenth century was in railway bonds, while the typical (private) foreign investment of the twentieth century is in the shares of a large oil company with assets overseas.

#### Π

If we look back on nineteenth-century experience we cannot help being struck far more by the contrasts than by the parallels with the present day. The under-developed countries of the modern world or at least in Asia and Africa—are quite unlike the under-developed countries that attracted most of the foreign capital in the nineteenth century. In the first place, their capital requirements in relation to the size of the world economy are much smaller. It is true that in terms of population they are far larger: Asia alone has half the world's population. But they are a great deal poorer; their own savings are correspondingly low—no more than a few dollars per head on the average; and the trade which they sustain is relatively small in amount and limited in variety. Few of them (outside Latin America and the petroleum exporters) have ever attracted private foreign investment on a large scale, and there is no reason to suppose that they are attracting less today than in the past.

This failure to attract large-scale investment is due principally to a further contrast in circumstances. Investment opportunities in the newly settled countries were associated with resource development on the grand scale. In 1913 no less than 40 per cent. of world exports of primary produce originated in the Western Hemisphere or Australasia<sup>1</sup>—a proportion which has since increased rather than fallen—and this enormous volume of trade was the fruit of earlier investment in which foreign capital played a critical part. In large measure it was the outcome of agricultural development based on improved transport and wide differences in production costs. Food and agricultural materials represented all but a small fraction of the primary produce exported from the newly settled areas, minerals (including petroleum) forming not much more than 10 per cent. Thus whatever form the investment took, it rested ultimately on an expansion of agriculture on virgin soils and on a displacement of European (particularly British) agriculture through large-scale movements of food.

There exists no similar scope for commercial investment in the under-developed countries of Asia and Africa. They cannot compete in the range of foodstuffs exported from temperate latitudes and are largely confined to tropical foodstuffs and mineral products. But the market for the former, although growing, is relatively inelastic, while investment in the latter meets with many obstacles and is apt to be denounced as the creation of an enclave of no permanent value to the debtor country.

It is sometimes said that one of the functions that foreign capital can perform is the building up of an infrastructure of social overhead capital that will permit of more rapid economic development. There is no doubt that historically this has been the most outstanding contribution of foreign investment, especially in newly settled countries. But the use of the word 'infrastructure' implies that a structure will come into existence. In the older under-developed countries this does not happen nearly so readily as in the countries settled from abroad. The main reason for this lies in the special difficulty of resource development when there is no striking cost difference to exploit and when agricultural change is retarded by the tenures, practices and attitudes of an already settled country. The same factors that made it so much easier to finance the infrastructure of the newer countries ensured the building of an industrial structure on top of it; but in older countries, as experience has shown over and over again, an infrastructure is not enough.

The process of industrialization has always required, and has very often been preceded by, an expansion of agricultural output. It is this

<sup>1</sup> P. Lamartine Yates, Forty Years of Foreign Trade (London, 1959), p. 231.

expansion that has enabled the domestic market to grow, specialization to take hold and industry to reach a scale that allowed mechanical methods to be employed. Even where external demand for foodstuffs does little to furnish the initial impulse, therefore, there cannot be much question of the overwhelming need to improve agricultural methods in under-developed countries; and the extent to which additional capital could contribute to this is a question which I shall discuss later.

If we leave agriculture aside for the moment, the next biggest sector in consumption is clothing, and for this reason alone the development of a modern textile industry is bound to be of outstanding importance in an under-developed country. It happens that it is one of the easiest industries to mechanize; that the minimum scale of efficient production is relatively low; and that both the raw materials and finished products are very light in relation to their value so that production can be widely dispersed without great loss. In the absence of a decisive cost advantage in agriculture, it is conceivable that a country could develop a marked advantage (in labour costs at least) in textiles. Not only is it conceivable but this is precisely what many countries have done in the early stages of industrialization. In Scotland, for example, there were more workers in the textiles, leather and clothing group of industries in 1851 than in the whole of agriculture, forestry and fishing, and nearly thrice as many as in all other manufacturing industries put together; much the same was true of England and Wales. As late as 1900 nearly half Britain's exports of manufactures still consisted of textiles. For many other European countries the ratio was not much lower, and for Japan it was, and long remained, appreciably higher.

Here, too, we are faced with a contrast. The under-developed countries of the modern world cannot so easily use the textile industries as a springboard to industrialization, even if they can establish a cost advantage. The international specialization of the nineteenth century allowed one group of countries to make full use of their advantages as food producers and another to turn to equal account their advantages as textile manufacturers. Trade grew very rapidly in consequence of the structural shifts that increasing specialization involved. But just as the under-developed countries of Asia and Africa cannot now displace the great producers of non-tropical foodstuffs from their dominant position and are obliged by the facts of geography to concentrate on a narrow range of tropical products and minerals, so they are also prevented from displacing the great textile exporters because they have entered the international market late in the day, and can offer only the low-grade textiles of which they were themselves, until recently, the major importers. They have also to reckon with strong protectionist forces, which although not new, operate more through quotas than tariffs and so impose a ceiling on trade which was previously absent. World trade in textiles, once so large a proportion of total trade in manufactures, has now shrunk to the point at which it accounts, not for one-third as in 1900, but for oneseventh or less.

Textiles are illustrative of a further point of contrast. In the countries between which the major flows of capital took place in the nineteenth century, there was, as a rule, no great difference in incomelevels. This meant that the importing countries had a large domestic market for manufactures which provided a natural base for industrialization. It was not necessary for governments to force the pace, although by tariffs and in other ways they did attempt to do so: the market was a sufficient engine of growth. Moreover, the kind of manufactures in demand was similar to the kind entering into trade, if only because a high proportion was in fact imported. But in the less-advanced countries of today the difference in income-levels not only narrows the domestic market but is apt to create a gap between the products of indigenous industry and the products that might be sold abroad. Manufactures necessarily adapted to the needs of a poorer consuming public are not easily marketed in the richer countries that account for over half the trade of the world.

III

When we turn to the theory of international capital flows we are struck at once by its astonishing formalism. The classical economists adopted as a working hypothesis the entire absence of capital movements between countries (although this did not prevent them from analysing the probable consequences of such movements). Until very recently, foreign investment continued to be discussed with little more than a passing reference to its interrelation with domestic investment and no reference at all to the type of asset that it customarily yields in the recipient country, the flows in the reverse direction that frequently accompany it, or the type of countries between which the movement of capital is likely to be greatest.

There were some economists, of whom Hobson is the best known,

who argued that savings might outrun domestic investment opportunities and turn the export of capital into a safety-valve for capitalism. But they did not express their views with any theoretical rigour and the impression made on more orthodox economists was not assisted by the publication of Hobson's ideas in a decade in which the shortage of capital for domestic purposes could hardly have been more apparent. Even Hobson talked in aggregates and abstractions; and in the vulgarized Leninist version in which his theory entered the Marxist canon, the abstractions—'finance-capitalism', 'super-profits' and so on—become largely emotive. All this literature, moreover, centred on the export of capital; until the work of Taussig and his pupils, especially Viner and Williams, practically nothing was written by a professional economist from the point of view of the capital-importing country.

I doubt whether even today we have formulated a theory of investment that does justice to the historical experience and the mass of statistical data that have become available. Existing theory does not even pose, much less answer, the questions material to our present problem. What governs the division of a country's savings between home and foreign investment? What determines which countries will lend and which will borrow? What causes the total volume of international investment to expand or contract? Why is it that, so far from remaining obstinately at home, capital does not move bodily to the countries where labour is abundant so as to create in new locations the kind of industrial complex that already exists in more advanced countries? Or, to put the question the other way round, why do countries that are not inherently incapable of mastering the techniques of modern industry fail to obtain from abroad the resources that might transform them?

I cannot do justice here to questions such as these, although I shall try to indicate briefly the direction my own thoughts take. Roughly speaking, there have been two different approaches to the relationship between home and foreign investment. There are those who think in marginal terms and concentrate on the functioning of the international capital market, and those who use aggregative concepts and seek to transfer to an international plane theorems originally devised for a closed system. If we follow the first line of thought we make comparisons between the marginal productivity of capital in different countries and relative rates of interest and profit in order to bring out the market forces governing the international flow of capital.

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If we follow the second line of thought we are led to examine why some countries appear to have a surplus and others a shortage of capital. This latter approach is particularly congenial to those who treat capital requirements as a more or less fixed proportion of output, without much regard to interest rates or variations in capital-output ratios. It used to issue in the conclusion that capitalist countries would eventually develop a surplus of capital and need a convenient 'sink' for it such as foreign investment could provide. It is more commonly used today in order to demonstrate that under-developed countries have a chronic shortage of capital and would develop more rapidly if they could borrow more abroad or find an assortment of fairy godmothers, preferably of international extraction, to bless them with grants and low-interest loans.

I need not emphasize that the view of foreign investment as a 'sink' for surplus capital is by no means dead. It is still part of the accepted dogma of Communist theory, conveniently extinguishing any merit that may seem to attach to a loan or investment by a capitalist country but leaving unsullied a similar act of investment by a socialist country. It was a view to which Keynes was strongly drawn in the thirties. Even today much of the discussion among economists of the duties of creditor countries is coloured by it; there is a common presumption that the need to lend abroad gets built into the structure of an advanced economy as if it were doomed to save more than it could absorb in domestic investment.

It is with the other side of the picture, however, that we are concerned: the shortage of capital in under-developed countries. This shortage can be analysed in various ways. In terms of the first approach the issue is one of the return to be expected from additional investment, the extent to which finance is a bottleneck in development, the availability of domestic savings and their mobilization for specific productive purposes, and the terms on which funds can be obtained from domestic and foreign sources. This is the approach which I shall adopt in the next section. In terms of the second approach it is taken for granted that an acceleration of growth must inflate capital requirements more or less correspondingly and that, as savings are unlikely to change much in relation to income, foreign capital may have to fill the gap. There is, however, an ambiguity in this second approach since it is not clear whether the acceleration of growth can occur in the absence of this foreign borrowing, and merely peters out if the resulting capital requirements are not met, or

whether growth is itself to be attributed to increased investment so that foreign borrowing is an indispensable condition for acceleration.

It is a matter of some obscurity why, if the second approach is accepted, so many countries have succeeded in industrializing themselves without much foreign borrowing. The historical facts strongly suggest that if more rapid growth operates on capital requirements it also affects the supply of savings and that there are mechanisms in the economic system that help to keep the two in balance without those lurches in the balance of payments that so many models of economic growth would produce. I have dealt elsewhere with some of those mechanisms, amongst which the responsiveness of house-building to changes in interest rates and other influences is particularly important. As for savings, the evidence suggests a slow and progressive rise in savings-ratios during the process of acceleration, followed by a plateau when the rate of growth becomes more stable. The narrowness of the capital market and the consequent importance of selffinance also tie savings and capital requirements together more tightly than in an already developed economy.

The adoption of the second (aggregative) approach disposes underdeveloped countries to treat foreign investment as a residual in their plans. It provides a balancing element in two distinct equations, one relating to the growth of total output and one to the balance of payments. In the first equation it is usual to lay down in advance some planned rate of growth of the economy and then try to devise a set of policies that will enable this rate to be achieved. The rate laid down is taken to imply a corresponding rate of capital formation, on the basis of an assumed capital-output ratio; and this rate of capital formation, taken in conjunction with an assumed marginal rate of savings, leaves a deficit which is interpreted as the resulting shortage of capital. This shortage is then identified with the scale on which it will be necessary to obtain loans and grants from abroad.

At the same time, a second equation is constructed to show the prospective movement in exports and imports over the period of the plan. From this equation emerges a second deficit, this time in the balance of payments, and this deficit, like the first, is assumed to be covered by loans and grants. The two deficits need not exactly coincide, since it may be possible to draw on or add to reserves of foreign exchange. But any substantial divergence between them is likely to lead to a reconsideration of the original targets and to revisions in investment and other programmes designed to reconcile the two sets of calculations.

This procedure, originally applied to individual countries, has come to be used also in relation to the whole group of under-developed countries in order to show on what scale capital must flow to them if their standards of living are to be improved at some predetermined rate. The United Nations experts who reported in 1951 on 'Measures for the Economic Development of Under-developed Countries' put the domestic savings of under-developed countries, including mainland China, at a little over \$5,000 million in 1949 and went on to calculate that if *per caput* incomes were to be increased by 2 per cent. per annum these savings would have to be supplemented by loans and grants of \$14,000 million (or, if domestic savings-ratios rose with the growth in income, at least \$10,000 million). Of this total no less than 70 per cent. was required for countries in Asia.

The same kind of calculation has been attempted by a number of other economists. The most recent attempts are in Paul Hoffman's One Hundred Countries: One and One-quarter Billion People, and in International Trade 1959, the annual report issued by G.A.T.T. These yield rather more modest totals than the calculations made by the United Nations ten years ago. Paul Hoffman, for example, puts the inflow of additional capital necessary to raise per caput incomes by 2 per cent. per annum at \$3 billion a year and the current net inflow he puts at \$4 billion a year.<sup>1</sup> He gives no estimate of domestic savings, but if we take this at 7 per cent. of income-the assumption made in the G.A.T.T. report-we obtain a total for net domestic capital formation of \$15.5 billion. Hoffman also estimates the export earnings of the under-developed countries in the sixties at \$378 billion over the decade, and their import requirements at \$440 billion together with a small defict of \$8 billion on invisibles. This leaves a deficit averaging \$7 billion a year, the same figure as the shortage of capital already estimated.

The G.A.T.T. calculations show how tentative any estimates of this kind must be, even if one accepts the logic by which they are obtained. For a group of low-income countries that excludes the main petroleum exporters but includes Australia, New Zealand and South Africa, this study estimates that the average *per caput* income rose from \$103 in 1950 to \$118.5 in 1958, or by 1.8 per cent. per

<sup>&</sup>lt;sup>1</sup> Op. cit., p. 46. These figures are for a group of countries which do not include mainland China.

annum.<sup>1</sup> If these figures are accepted it is not very obvious why *any* larger inflow of capital should be required in order to attain the objective of a 2 per cent. per annum increase.

It is perhaps as well, before we go on to look at the assumptions behind these calculations, to be a little clearer about the facts. Whereas Hoffman puts the rate of growth of the under-developed countries at 3 per cent. per annum, the G.A.T.T. report adopts the higher rate of  $3 \cdot 8$  and thereby comes near to doubling the implied *per caput* rate of growth. All that one can really be sure of is that growth is taking place, that it is much more rapid in some underdeveloped countries than in others, and that it is by no means certain that the *average* (if averages in this context have any meaning) is lower than the *average* for industrial countries. This is not to deny that the gap in living standards is widening: an increase by 2 per cent. per head is equivalent to only \$2 or so in an under-developed country but \$20 or more in an advanced country. But if we are talking in terms of proportions it is not possible to say with confidence which group of countries is showing the faster rate of growth.

Again, it is unwise to be dogmatic about rates of saving in the under-developed countries. A few years ago it was common to accept an average of 5 per cent. of income, and this may well have been on the high side for countries at a very early stage in development. But for some under-developed countries it is obviously much too low and there is clearly a wide dispersion. The tendency now is to raise the average a little, to, say, 7 per cent., without much reflection on the precise significance of such an average. The relevant percentage for most purposes relates to the marginal rate of saving, and here there is a disposition to use much higher estimates: indeed, some countries are prepared to assume that over 25 per cent. of any increment in income will be saved, an assumption for which there does not appear to be any firm statistical basis.

Even the current inflow of capital is not known with any precision. For the five years 1954-8 the total for loans and grants (on a bilateral basis only) to low-income countries has been put at  $13\cdot4$  billion, from which has to be deducted  $1\cdot1$  billion for capital repayments.<sup>2</sup> This leaves an average of  $2\cdot5$  billion per annum.

<sup>&</sup>lt;sup>1</sup> Op. cit., p. 37 n. It is not clear what assumption is made as to price changes, but the text of the report implies that the increase is in real terms. Population grew at 2 per cent. per annum, so that the annual rate of increase of the national income of the group was 3.8 per cent.

<sup>&</sup>lt;sup>2</sup> International Trade ,1959, p. 44.

Private foreign investment and aid extended through international agencies, including World Bank loans, averaged between 1.5 and 2 billion; and, in addition, short- and medium-term credits amounted to at least 500 million a year. The total inflow of capital may thus have reached 5 billion a year, and as the total was increasing throughout the period it is likely to have been in excess of 5 billion by 1958–9. The G.A.T.T. report shows a total inflow rising from 1.9 billion in 1958.

One plain implication of these figures is that the current capital inflow bears a relation to the domestic savings of the under-developed countries that is much higher than was customary in the development of the newly settled countries. If we accept the Hoffman estimates and put savings at 7 per cent. of income, net domestic capital formation comes to  $12\cdot5$  billion, of which about one-third is financed from abroad. If it were possible to increase the inflow at once to 7 billion the ratio would increase to 45 per cent. If, on the other hand, we accepted the extreme position postulated in the U.N. 1951 Report, domestic savings would furnish only a little over one-quarter of the total supply of capital.

The calculations also suggest that unless foreign capital were supplied by way of grant, external indebtedness would increase very rapidly. The external public debt of twenty-one low-income countries listed by I.B.R.D.<sup>1</sup> was increasing at the rate of over \$1 billion per annum in the late fifties and there was, in addition, an increase in private debt on short-term and long-term account. Debt service payments for this group absorbed 7.5 per cent. of external earnings in 1958 and the proportion was increasing rapidly. If additional capital was supplied on commercial terms rather than by way of grant, the inflow of an extra \$3 billion a year would obviously have very serious implications for the eventual solvency of the recipients and indeed would represent an impossible burden for countries whose entire income does not currently exceed about \$125 billion.

The amount of public aid to under-developed countries has in fact grown steadily throughout the fifties. From about \$2 billion around 1954 it has increased without a set-back by about 15 per cent. per annum

<sup>&</sup>lt;sup>1</sup> Ibid., p. 42. These figures include the independent countries of the sterling area, some of which are not low-income countries and have been substantial importers of capital; on the other hand, they exclude the petroleum exporters and most of the French overseas territories which are included in the Hoffman estimates.

<sup>&</sup>lt;sup>2</sup> D. Avramovic and L. Gulhati, Debt-servicing Problems of Low-income Countries, 1956–58 (Johns Hopkins Press, 1960), p. 14.

to around  $3\frac{1}{2}$  billion in 1960. As Dr. H. W. Singer points out, 'public aid has been a more dependable element in the flow of foreign exchange and resources to the under-developed countries than either export earnings, service payments, flow of private capital or any other balance of payments item'.<sup>1</sup> The problem that calls for thought is no longer the respective contributions of private foreign investment and domestic investment to the development of the less-advanced countries, but how best to make use of foreign aid in conjunction with commercial investment.

While an inflow of a further \$3 billion would involve great difficulties *within* the low-income countries either from the point of view of immediate absorption or in terms of the burden of eventual repayment it would not impose an overwhelming burden on the advanced countries. If an additional \$3 billion a year would allow the underdeveloped world to take off, it could hardly be regarded as an unduly high price to pay.

In my view, however, it is not possible to buy development so cheaply. The provision of additional capital may yield a more adequate infrastructure but it rarely by itself generates rapid development unless there are already large investment opportunities going a-begging. In the Western world the great dynamic forces have been technical progress and a widening of markets, with all the specialization and economies of scale, internal and external, to which they give rise. Capital accumulation has allowed these forces freer play and conditioned the speed with which individual economies have responded; but it has rarely been the dominant influence. Like many other obstacles to growth, a shortage of finance has yielded to the pressure of opportunity; the existence or creation of outlets for capital has usually been sufficient to encourage a greater effort of self-finance. I believe that other bottlenecks-skill, entrepreneurial talent, administrative experience-yield to the same pressure wherever it is within the power of the individual to respond, and that even social attitudes and institutions unfavourable to growth are slowly modified as the individual perception of opportunities forgone become keener. But I do not wish, in saying this, to belittle the importance of capital accumulation or the scope for intervention by public authorities. In all development there is an interplay between individual effort and the social and economic framework within which that effort is exerted:

<sup>&</sup>lt;sup>1</sup> H. W. Singer, Recent Trends in Economic Thought in Under-developed Countries (mimeographed, November 1960), p. 31.

and in the less-advanced countries changes in the framework, which are usually expensive in capital (broadly interpreted), occupy a commanding position.

It is only too obvious, for example, that the widening of the market rests on the creation of a network of communications that in its demands on capital is far beyond the limits of self-finance. Some capital may be raised from the richer members of the community or through varied forms of taxation; but there are occasions when the limits of what can be done in this way fail to reach the minimum scale necessary for a modern transport system. Similarly, if technical progress abroad is to make its influence felt, there has to be a costly outlay on education and other social services that may strain the budget of a poor country. Apart from this, there is likely to be a need to do many things at once, each individually unprofitable, and engage in investment on a large scale so as to reap a collective advantage from mutually supporting projects.

For these and other reasons, which it would be impossible to enter into in detail in this paper, I do not doubt that a higher rate of investment must be a prime object of policy in under-developed countries and that this higher rate is likely to strain the revenues of the central governments. The more rapid the rate of development aimed at, the greater will be the need for capital, if only because capital can be used to buy time. Initially at all events savings will have to be supplemented out of foreign capital, whether by way of loan or grant. How long such a state of affairs need continue is difficult to predict. The moreadvanced countries may not relish an indefinite unilateral transfer of resources by way of grant and the less-advanced countries may view with equal disfavour a cumulative increase in their external liabilities. At some stage, if the operation is successful, domestic savings should begin to overtake capital requirements, but even if savings-ratios rise relatively quickly, the transfer of capital may have to continue for a long time. This will be all the more true if the pace of development is set by the availability of finance. In my judgement this is likely to be true only if we treat as capital not only the resources that flow into the creation of new fixed assets but also the much larger investment in new forms of social organization, new habits and attitudes, personal experience, knowledge and skills that is a precondition of continuing development. It is this investment, and the effort of modernization that it represents, that some under-developed countries seem to find beyond their powers.

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#### IV

No country likes to depend upon foreign capital when it can mobilize domestic capital for the same purpose. Apart from any political considerations which may tell against foreign borrowing, the assumption of external liabilities mortgages its future earnings of foreign exchange while the assets created may contribute little directly, or even indirectly, to those earnings. An advanced country with the resourcefulness to vary the range of its exports and imports may have little fear of transfer difficulties and be willing to regard new external liabilities as roughly balanced by an equal addition to its domestic assets. But the typical under-developed country, heavily dependent on exports of a single commodity and with a highly inelastic demand for most of its imports, cannot so freely assume external liabilities. It may not go so far as to limit its foreign borrowing to those cases where it expects an eventual net gain to its balance of payments; but it is likely to treat foreign exchange as a bottleneck limiting economic development and run the risk of further constriction only if this seems the lesser of two evils. Where it is in a position to regulate the inflow of foreign capital, therefore, it will encourage this inflow only where it helps to remove some other important obstacle to the development of the economy, and where this cannot be done by redirecting the flow of domestic investment or by supplementing the flow out of additional savings, private or public.

Foreign borrowing by an under-developed country should be capable of justification, therefore, under one or more of three headings:

(a) It may permit of a higher rate of domestic investment than domestic savings alone would support. This is not a necessary consequence of foreign borrowing, especially if one accepts the view that there are latent savings in under-developed economies that could be mobilized at a higher level of activity. With this qualification, the 'topping up' of domestic savings is the main justification for borrowing abroad. Indeed, as we have seen,<sup>1</sup> the world is full of enthusiasts for 'topping-up' who regard a shortage of capital as the principal brake on economic progress in under-developed countries.

(b) It may be difficult to mobilize domestic savings for the finance of projects that are badly needed for economic development. This may happen, for example, in the private sector if, as is often true in the early stages of development, the capital market is itself under-

<sup>1</sup> See above, p. 89.

developed. In general, however, it is preferable to set about improving domestic financial arrangements, if this is the only obstacle to the investment desired, rather than make use of foreign capital merely because it is easier to raise it. The improvements necessary usually involve the mobilization of liquid funds through financial intermediaries, the supply of those funds for less liquid purposes to productive borrowers and the creation of a market in long-term securities of all kinds. This is a large subject which I do not propose to discuss further except in relation to agriculture.<sup>1</sup>

(c) Foreign capital may bring with it other scarce productive factors, such as technical 'know-how', business experience and so on, that can make an important and continuing contribution to economic development. To this possibility I return below.

The case for foreign borrowing is generally admitted to be strongest in relation to public-utility investment and I therefore refrain from developing this case. Instead, I shall confine myself to a discussion of investment in primary activities, beginning with mines and plantations and going on to indigenous agriculture after a short interpolation on manufacturing.

The fear of transfer difficulties that inhibits foreign investment is obviously unlikely to arise when the investment is in enterprises that are themselves the source of foreign exchange, such as mines and plantations. The exports flowing from those enterprises must be more than sufficient to allow the transfer of the profits earned so that from the foreigner's point of view they are relatively attractive. From the country's point of view, however, they have many drawbacks and are often dismissed as enclaves-an extension into the economy of one country of the trading system of another. Not only are they not an integral part of the economy of the host country, it is alleged, but they may disrupt its social structure, disintegrating an established rural economy, creating appetites, habits and standards that cannot subsequently be conjured away, and often laying up trouble by importing alien immigrants who are never entirely assimilated and prevent the local inhabitants from reaping the gains from a higher level of economic activity.<sup>2</sup>

There is obviously a great deal of truth in this view and no one doubts that a country would gain far more if it could conduct the

<sup>1</sup> See below, p. 100.

<sup>&</sup>lt;sup>2</sup> See, for example, S. H. Frankel, op. cit., pp. 131 et seq.; H. Myint, 'The Classical Theory of International Trade and the Under-developed Countries', *Economic Journal*, June 1958.

same operations without making use of foreign capital. But this is rarely a genuine alternative. An under-developed country, even if it could raise the capital, is often lacking in the knowledge, skill and experience to manage enterprises of the type run by foreigners, and the management and the capital form a single package such that it is impossible to have one without the other. In some countries where a plantation economy has been created the incentives to economic effort were previously too feeble, and plantations supply a stimulus which in course of time may become unnecessary.<sup>1</sup> In other countries, such as Ceylon and Malaya, it was foreign enterprise which introduced the crops, originally in plantations, that are now the staple exports. It also developed the mineral resources which bring in well over a quarter of the total export earnings of the under-developed countries as a group. These forms of activity furnish resources that remain within the economy and that are strategic to its further development: foreign exchange, which is usually a greater bottleneck than capital, and tax revenue, which can be applied to capital purposes.<sup>2</sup>

It is arguable that all development is likely to take the form of an enclave—though not necessarily a foreign enclave—within an existing social and economic structure. The fact that the enclave is managed by foreigners and employs alien immigrants who are bound to excite antagonisms by their very success intensifies the stress and strain of development and adds to its ultimate social cost. But some stress and strain is inevitable and the better adjusted a society is to primitive conditions the greater is likely to be the disintegration required in order to transform it. The more contact there is with foreigners the more rapidly the process of transformation can take hold; and however weak the links between an enclave and the rest of the economy it can hardly avoid exercising a powerful influence, by demonstration if in no other way, on the thinking of the population.

The bias, justifiable or not, which is often shown against foreign investment in mining and plantations is rarely extended with the same force to investment in manufacturing. The reasons for this appear to be threefold. First of all, manufacturing is commonly thought of as the spearhead of economic development, not only because a high

<sup>&</sup>lt;sup>1</sup> J. S. G. Wilson, *Economic Environment and Development Programmes* (University of Hull Publications, 1960). In the New Hebrides, for example, the indigenous population now produces about half the copra exported and this proportion is rising.

<sup>&</sup>lt;sup>2</sup> Cf. Boris C. Swerling (Stanford University), Some Interrelationships between Agricultural Trade and Economic Development (mimeographed, 1960), p. 31: 'The tax machinery can remove much economic remoteness even from mineral enclaves.'

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level of manufacturing is the mark of an advanced country but also because experience in manufacturing opens out a wide field of opportunity. An economy specialized in primary activities can take advantage of improvements in technique that affect those activities; but it cannot move readily between them, except where one crop can be planted in place of another, or between primary activities and manufacturing. On the other hand, there is greater mobility within the various branches of industry and fresh opportunities of development are constantly arising in new directions because of the greater range of technical knowledge that becomes available from year to year. Secondly, the linkages within manufacturing are closer and more powerful than the linkages in agriculture and mining. The growth of one industry is likely to yield external economies by facilitating the development of others which either supply it with materials, components or services, or use its product for further processing, or can take advantage of the facilities which it brings into existence in the shape of better transport and information services, improved banking arrangements, a more extensive range of labour skills and managerial experience and so on. Thirdly, the starting of a new manufacturing enterprise under foreign management may be more compatible with the starting of similar domestic enterprises or a later buying out of the foreign company than in the parallel case of foreign mines and plantations.

It may well be that some of these reasons for welcoming manufacturing investment are not well founded. It is not immediately obvious that a foreign-controlled textile mill must be less of an enclave than a foreign-controlled tin-mine, or that the repercussions of a successful export trade in raw cotton or tea must of necessity have a narrower compass than the building of a steel-rolling mill. There are advanced countries like Canada that are just as suspicious of foreign ownership of a large slice of their manufacturing sector as other countries are of foreign plantations; and most under-developed countries are well aware that foreign manufacturing capital usually earns a relatively high return and if employed in supplying goods for the domestic market can be a substantial absorbent of scarce foreign exchange.

In any event the main justification for making use of foreign capital in manufacturing is rarely a domestic shortage of capital. Such a shortage can be relieved at far less cost by borrowing to pay for public utilities since these can usually be financed at the rates charged by international agencies like the World Bank; and these rates, although

the subject of constant complaint, are well under half the rates of profit earned on the average by foreign capital in manufacturing. It is not because capital is scarce but because management and technical knowledge are still scarcer that countries encourage foreign enterprises to build local manufacturing plants.

The corollary is obvious: that the less-advanced countries need to find and train men able to run industrial undertakings. This is not just a matter of increasing the supply of risk-capital nor even of encouraging local entrepreneurs. It extends from the top administrative skills to the lowest: from the man with an eye to a worth-while commercial risk and the personality, knowledge and experience to lick a large business into shape to the workman who has to submit to factory discipline and has learned how to take proper care of his tools. The arts of supervision and foremanship are just as important as provision for training in advanced technology. It is not enough to be able to carry on where others have left off. There has to be, throughout the whole industrial system, a power to innovate, a built-in incentive to make further improvements, a linking of personal advantage with those improvements and a readiness to look for opportunities of making them. Without this widespread interest in development and will to develop, coupled with the background of technical knowledge and experience that gives reality to the opportunities of development, growth cannot become self-sustaining.

All this, needless to say, is easier to say than to do. It takes time, for in many directions there is no substitute for practice, experience and the confidence that comes from success. Education helps. But education, in the sense of what is learned at the state's expense outside the factory, is only a small part of the complex intellectual and moral endowment that has to be built up.

In the creation of this intangible capital foreign investment has a part to play, especially if local enterprise is allowed to participate and training is given to the local staff. But the physical assets resulting from the investment are of limited value unless the community that uses them makes the simultaneous adjustments that industrialism requires. The scope for foreign investment in manufacturing is also relatively small because manufacturing in a poor country is necessarily a relatively small sector of the economy. In the absence of large export opportunities—which, for reasons already given, very rarely exist—the market for manufactured goods is limited by the low level of income per head, and the narrowness of the market tends to raise costs by restricting the scale of production. Direct investment by advanced countries, therefore, remains small in comparison with their investment in the manufacturing sector of other advanced countries and at the same time tends to be confined to those branches of industry where large-scale investment is possible.<sup>1</sup>

These considerations point to the importance of a general rise in income-levels in the under-developed countries and of ensuring that the expansion of industry is not checked by an inelastic response on the part of agriculture. In all the countries that have succeeded in transforming themselves into advanced industrial economies an increase in agricultural productivity preceded or accompanied the growth of industry and there was no tendency, even in Britain and Japan, to rely more heavily on food imports until a comparatively late stage. On the other hand, there are some grounds for thinking that, in some of the countries that failed to develop under what appeared to be favourable conditions, a sluggishness of agricultural output was a principal obstacle to industrialization.<sup>2</sup> Agriculture is by far the largest sector, especially from the point of view of employment, in the under-developed countries and it would be surprising if it were left unaffected by rapid growth in other sectors or indeed failed to exercise a powerful influence on their development. The danger that agriculture may act as a brake on the growth of the entire economy has been recognized from the time of the physiocrats and still dominates the plans of many under-developed countries.<sup>3</sup>

Experience suggests that the forces of growth rarely originate in the agricultural sector of the economy and that more commonly it adapts itself to the growth of other sectors.<sup>4</sup> This is noticeable even in localities where the development of an urban market gradually transforms agricultural methods while in more remote areas methods remain unchanged, the degree of adaptation varying with the pressure of

<sup>1</sup> Of the U.S. direct investments in manufacturing enterprises abroad, over threequarters are in Canada and Europe and less than 4 per cent. in Asia and Africa (*Survey* of *Current Business*, September 1960).

<sup>2</sup> M. Boserup, Agrarian Structure and Take-off (paper delivered at the Conference of the International Economic Association, Konstanz, 1960), pp. 3-4, citing the examples of India in the late nineteenth century and Mexico at the beginning of the twentieth century.

<sup>3</sup> Cf. Boserup, op. cit., p. 7: 'If it were to be put in a nutshell, the planning procedure in India could be said to consist in making a bold guess at the rate at which the output of foodgrains can be stepped up, and then to let all the rest of the plan follow from this guess. There is something almost physiocratic about this procedure. But then there is also a striking analogy between the present Indian situation and that of eighteenth-century France: the idea of the quest for economic progress among the intelligentsia, and on the other hand a desperately immobile and tradition-bound agriculture.'

<sup>4</sup> Boserup, op. cit., p. 6.

demand and diminishing along the radius from the market. Agricultural development usually requires some external stimulus; and it is probable that the stimulus has to be greater the lower the level from which one starts.

If we ask in what ways investment can contribute to agricultural development the answer lies in part in the provision of this external stimulus and in part in the expenditure of capital within agriculture itself.

Historically, the most powerful external stimulus has been an increase in demand arising either abroad or through industrialization at home. This expansion in markets has usually been associated with an improvement in transport, and the first and most obvious use for additional capital to assist agricultural development is in better communications between rural areas and urban markets at home or abroad. The influence of such improvements is not confined to the opportunities for greater specialization and enlarged outputs that they introduce. They also enable new consumer goods to be supplied to the villages and provide fresh incentives to increased production; they make it easier for the natural increase of the countryside to be drained off to other employment and permit a more rational use of the available land; above all they breach the cake of custom and facilitate that penetration of rural areas with modern ideas from which flows innovation in crops and methods of production.

Investment in transport happens to be an easier and cheaper way of absorbing foreign capital than almost any other. It lends itself to provision under international auspices; for example, through the World Bank, which has already made large loans for transport improvements in under-developed countries. In spite of heavy international investment in the past, however, the transport systems in most of those countries are still relatively primitive and further investment is badly needed if agriculture is to reach its full potential.

The first response of agriculture to a lowering of transport costs is normally towards greater specialization and the growing of cash crops. But this may involve little change in systems of tenure or in methods of production and no continuous improvement in economic levels. Again and again in the past century the opening up of foreign markets has led to an expansion in production and the introduction of new crops but to little change in the institutions and techniques of agriculture in under-developed countries. Much of the increase in production has been offset by a rise in population, and the market for manufactured

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goods, already far lower than in western countries at the outset of industrialization, has remained too restricted for rapid growth.

The expansion in trade that results from improved communications is a necessary step towards economic development even if, at first, the trade is usually channelled abroad. It brings into existence a monetary economy without which no economic development is possible. The fact that, typically, there is a high degree of specialization and that most under-developed countries are monocultures in the sense that they are heavily dependent on a single export does not take from the value of this first step. But it does throw into relief the limitations of such a step and the consequences of failure to take the next step and accomplish a general and widespread improvement in agriculture. Although it may raise foreign exchange earnings to a remarkably high level in relation to the national income, it does so at some sacrifice in elasticity and by postponing the really crucial changes in agricultural methods.

When we turn to consider how these methods can be improved and how investment can contribute to this improvement, we at once encounter the thorny question of tenure. In Europe rapid agricultural development was found to be possible under a wide variety of systems of tenure; by far the least favourable system was that of sharecropping. It was only possible to make progress, however, as a result of modifications in the various systems, all of them tending in a single direction: towards the establishment of clear and exclusive rights in land.<sup>1</sup> In many of the under-developed countries not only does the system of tenure that is conspicuously unfavourable to development obtain, but the rights of the cultivator are neither clear nor exclusive. The fact that in others among them, such as Mexico and Japan, economic development accelerated after sweeping agricultural reforms is also significant. While it is no part of the purpose of this paper to argue the case for land reform, it would be utterly unreal to discuss the contribution to agricultural change that can be made by capital investment, domestic or foreign, without stressing the institutional barriers that frustrate such investment.

On the other hand, we know that productivity is far below the levels demonstrably feasible. In Japan, yields were no higher a hundred years ago than they are today in the countries of south-east Asia which present the greatest challenge of all the under-developed countries. Yet they have been raised threefold without any change in the size-

<sup>1</sup> Boserup, op. cit., p. 11.

distribution of the units of cultivation and with a relatively modest capital outlay.<sup>1</sup> It was this increase in productivity, rather than the expansion in the area under cultivation, that enabled Japan to feed her growing urban population and absorb into industrial employment the natural increase of the rural areas.

If the present low levels of agricultural productivity are to be raised it will not be sufficient to make more capital available. Just as it is true of industrial growth that the supply of capital is only one element in the situation, so it is true in agriculture. But whereas in industry there is a clearer field since the fixed assets have still to be created, in agriculture the problem is largely one of bringing about a change in the *current* use of the most important fixed asset—land—and persuading the *existing* cultivators to embark on such a change. It is this consideration that makes it so important to couple the provision of capital with policies that extend far beyond finance.

These policies must obviously include changes in taxation and tenure designed to give the cultivator more security and more incentive: consolidation of holdings, fixed rents and the extinction of communal rights (especially of common pasture) are a prerequisite of investment by individual landholders. But if those changes would encourage investment the reverse is no doubt also true: if capital were more freely available the changes might be carried out more quickly and smoothly. Similarly, agricultural-extension services, improvements in warehousing and marketing, and better credit facilities ought all to be mutually supporting elements in a common programme.

The present situation is generally one in which nearly the whole of the short- and long-term capital made available to agriculture comes from private sources. The All-India Rural Credit Survey showed that in India 70 per cent. of all borrowings were from moneylenders, 23 per cent. from relatives, traders and other private agencies, and only 7 per cent. from government, co-operatives and commercial banks.<sup>2</sup> Elsewhere in Asia and in Latin America, institutional sources of agricultural credit are equally insignificant. Nor is this situation altogether peculiar to under-developed countries. In Britain, for example, it has been estimated that out of a total indebtedness of

<sup>&</sup>lt;sup>1</sup> Cf. Henry Rosovsky and Kazushi Ohkawa, 'The Role of Agriculture in Modern Japanese Economic Development', *Economic Development and Cultural Change*, vol. ix, no. 1, part ii, October 1960, p. 65.

<sup>&</sup>lt;sup>2</sup> All-India Rural Credit Survey, 1954, vol. ii, General Report, p. 167. See also H. Belshaw, Agricultural Credit in Economically Under-developed Countries (F.A.O., Rome, 1959), pp. 58 et seq.

£879 million in 1954, £650 million was to private agencies, including merchants. The commercial banks, even in developed countries, are rarely the most important source of capital, Australia being an outstanding exception.<sup>1</sup>

What distinguishes the situation of cultivators in the underdeveloped countries is not their dependence on private credit but the high rates of interest paid for it, the restrictive conditions that lenders can impose on their freedom to buy and sell where they choose, and the difficulty of obtaining capital on medium or long term, either for carrying out improvements or for the purchase of land. The cultivator is also in a much weaker position because he has few assets of his own and is more given to borrowing for consumption purposes.

This situation, while difficult to remedy, does at least hold out the prospect of a progressive improvement if the cultivator will refrain from spending any gain in income from additional investment and any economy in interest from less onerous loans. The essential problem is to strengthen those institutional lenders who cater specially for agriculture and to enable them to compete more effectively with private lenders. Sometimes the institutional lenders can mobilize savings by co-operative effort through credit associations, savings banks and agricultural co-operatives.<sup>2</sup> But in the poorer countries it is usually necessary for the state to lend a hand by way of guarantee, by participating directly or through the central bank in the capital of mortgage banks and other specialized institutions, or by outright lending.

The need for central government support is the greater where agricultural indebtedness is largely to urban lenders so that agricultural savings are insufficient to effect any substantial net reduction: in India, for example, it has been estimated that only about onequarter of the total available credit is found within agriculture.<sup>3</sup> The need is heightened by the fluctuations of agricultural markets which oblige co-operatives to strive after liquidity and lend only against good security (usually immovable property), leaving the mass of

<sup>&</sup>lt;sup>t</sup> They supply 'approximately half the funds used by the farming community' according to F. H. Gruen, 'Capital Formation in Australian Agriculture', *International Journal of Agrarian Affairs*, vol. ii, no. 4, January 1958, p. 287.

<sup>&</sup>lt;sup>2</sup> For a good account of how this operates in a Western country, see K. Skovgaard, 'Capital Formation and Use in Danish Agriculture', ibid., no. 3, July 1957, pp. 209 et seq.; and, for a case-study of an under-developed country, C. R. C. Donald, *Co-operative Agricultural Credit in Cyprus* (Economic Development Institute, Washington, 1956, mimeographed).

<sup>&</sup>lt;sup>3</sup> All-India Rural Credit Survey, 1954, vol. ii, p. 169.

cultivators who cannot offer this security to borrow from private lenders at usurious rates.<sup>1</sup> A third factor making for active government support is the need to combine credit facilities with agricultural improvement. Since the education of the peasant in new techniques must form an integral part of agricultural improvement, there is a great deal to be said for trying to combine finance and technical assistance, whether through a system of supervised credit on the Latin American model, or through rural banking facilities under supervision by the central bank and supplemented by a farm extension service, as in the Philippines.<sup>2</sup>

However it is done, more capital has to be fed into agriculture, made available at lower rates of interest and for longer periods of time, and used in ways that will encourage productivity and thrift. If the last of these objects can be achieved the others become progressively easier since agriculture will begin to generate a larger flow of savings and this will either reduce the need for government finance or (more probably) widen the capital market and ease the task of the government and other institutional lenders in raising the necessary funds. But where is the government to get the money in the first place? And in what way can foreign capital help?

It is unlikely that there is any surplus of capital in the urban areas. Indeed, economists tend to assume that agriculture must generate savings in excess of its own requirements if the process of urbanization and industrialization is to be financed. It can be shown that this probably did occur in Japan.<sup>3</sup> It presumably also applied to the U.S.S.R. since confiscation of the land allowed the state to derive from agricultural revenues what would otherwise have been spent by landlord or peasant. In the U.S.A., and perhaps also in Britain, farmers appear nowadays to save more than they invest in agriculture.<sup>4</sup> But in the days when the frontier was being pushed westwards the

<sup>I</sup> In India about four-fifths of the debt owed to moneylenders is unsecured (*All-India Rural Credit Survey*, vol. ii, p. 169). For the effects of instability in world markets, see the U.N. paper included in *Selected Readings in Agricultural Credit*, International Conference on Agricultural and Co-operative Credit, 1952, pp. 72–75.

<sup>2</sup> See H. Belshaw, op cit., pp. 125-6 (for the Philippines), pp. 199 et seq. (for Latin America); and D. Brossard, *Manual of Supervised Agricultural Credit in Latin America* (F.A.O., Rome, 1955), for a full account.

<sup>3</sup> H. Rosovsky and K. Ohkawa, op. cit., p. 60.

<sup>4</sup> For the U.S.A. see W. C. Hood and A. Scott, *Output, Labour and Capital in the Canadian Economy.* For Britain the figures given by Ashby ('Capital Formation and Use in United Kingdom Agriculture', *International Journal of Agrarian Affairs*, vol. ii, no. 3, July 1957) imply a rate of investment in tenants' capital of perhaps  $\pounds_{30}$  m. per year while farmers' incomes were about  $\pounds_{400}$  m. per annum. It is unlikely that farmers saved much over 7 per cent. of their pre-tax incomes.

normal condition of affairs was surely the other way round. The immigrant either brought capital with him or began by taking employment and saving the minimum necessary to stock a farm. In the subsequent improvement and extension of his holding he was usually chronically short of capital and might try to supplement his earnings in the early years by outside employment.<sup>1</sup> Similarly in the early stages of development in Italy there is evidence of the reinvestment of trading profits by business men.<sup>2</sup>

Whatever the historical experience, there is not much scope for a large inter-sectoral transfer in under-developed countries. If the state cannot raise sufficient revenue or float large enough loans at home to supply agriculture with capital, it may try to raise money abroad. But this is a decision which, as previously explained, must be governed by the competing claims of other forms of investment, and the willingness of the state to accumulate liabilities in foreign currencies, not by the ease with which capital could be obtained abroad for the specific purpose of agricultural improvement.

Some of the private credit used by agriculturists in under-developed countries, however, is of foreign origin and this credit is highly productive. The movement of cash crops between under-developed countries and metropolitan centres overseas is usually financed by the importing country; and in the import trade of the under-developed countries, credit extended by large expatriate importers may extend down to the petty retail stage.<sup>3</sup> Apart from trade credit, however, there is not much likelihood that private foreign capital will be supplied, as it used to be, through loan companies, bond floatations by agricultural banks, and on deposit with overseas branches of the commercial banks.

On the other hand, now that most foreign capital comes from governments and international agencies, and an increasing proportion of it takes the form of grants, soft loans and contributions towards

<sup>3</sup> P. T. Bauer, *West African Trade* (Cambridge, 1955), p. 62. For a similar situation in Canadian economic development, see Easterbrook and Aitken, op. cit., p. 281: 'From the markets of Liverpool and London to the millers and merchants of Upper Canada there stretched a chain of debts and credits, paralleling in the sphere of finance the physical transport system of the St. Lawrence and the North Atlantic.'

<sup>&</sup>lt;sup>1</sup> For the process in Upper Canada see W. T. Easterbrook and Hugh G. T. Aitken, *Canadian Economic History* (Toronto, 1956), pp. 274 et seq.: 'The rate at which immigrants became farmers depended . . . primarily on the amount of capital which they could command. The process of assimilating immigrants into the production organization of the colony was essentially . . . a process of investment' (p. 275). <sup>2</sup> Cf. also V. Ciarocca in 'Capital and Credit in Agriculture', *International Journal of* 

<sup>&</sup>lt;sup>2</sup> Cf. also V. Ciarocca in 'Capital and Credit in Agriculture', International Journal of Agrarian Affairs, vol. ii, no. 4, January 1958, pp. 310-11.
<sup>3</sup> P. T. Bauer, West African Trade (Cambridge, 1955), p. 62. For a similar situation in

technical assistance, it is inevitable that agriculture should share in this inflow. There must already be a wide variety of ways in which it is affecting the agriculture of under-developed countries. I shall bring this paper to a close by indicating some of them.

The simplest arrangement is a direct government loan to finance permanent improvements: the most frequent loans of this type are for irrigation and reclamation schemes. A variant is the government loan for a multi-purpose project of which land reclamation and improvement forms part: the most spectacular example is the Aswan High Dam project, one aim of which is to enlarge the cultivated area of Egypt by 25 per cent. Many of the loans made by the International Bank to the governments of under-developed countries cover the foreign exchange costs of comprehensive schemes of agricultural development. The recent loan to the Sudan, for example, provides about one-third of the total cost of developing 240,000 acres for the cultivation of cotton, grain and other crops through the construction of irrigation canals, a network of dirt roads and branch railway lines, and a large addition to cotton ginning capacity.

A second possibility is to feed in agricultural credit through the central bank or through some financial intermediary enjoying government support. The Central Bank of Costa Rica, for example, has made use of the commercial banks to extend medium- and long-term credits to agriculture and has put itself in possession of the foreign exchange needed for this programme by borrowing from the International Bank. These loans have enabled more farm equipment to be imported and have at the same time helped to demonstrate the effectiveness of modern methods of cultivation. The International Bank has also lent to government credit institutions in Colombia, Peru and elsewhere to finance the importation of tractors and other farm equipment for sale to farmers.

Another possibility is direct participation in the capital of development banks and other financial institutions designed to provide farmers with credit. An example of this appears to be the use in the Philippines of counterpart funds derived from U.S. grants in order to help to finance the Agricultural Credit and Co-operative Financing Administration, set up in 1952 to promote agricultural co-operatives covering production, processing, storage and marketing as well as credit.<sup>1</sup> There is obviously scope for similar participation in other under-developed countries out of grants or counterpart funds.

<sup>1</sup> Belshaw, op. cit., p. 194.

The provision of agricultural surpluses against local currency is a further example of a capital transfer that has important effects on local agriculture. As it has operated up till now, it has helped to finance a movement of grain from North America to under-developed countries, and while this has a number of undesirable features, even from the point of view of the recipient country,<sup>1</sup> it has probably given the pattern of agriculture in over-populated countries a twist in the right direction. It reduces the pressure on land and cuts out a highly seasonal element in the demand for farm labour. At the same time the supply of food, so long as it can be counted upon, eases two bottlenecks, either of which might slow down industrial development: an agricultural bottleneck threatening inflation and a curtailment of living standards in the towns; and a bottleneck in foreign exchange that would arise if food imports had to be paid for.

But in the main, in agriculture as in the rest of the economy, the burden of finance must rest mainly on domestic savings. It may be possible with foreign capital to speed things up and develop a momentum that allows growth to become self-sustaining: to improve the structure of the economy by borrowing from international agencies for the larger projects, especially in transport and power, and from private investors for the introduction of new manufacturing techniques and products; to channel more foreign capital, borrowed on commercial terms or grant-aided, through financial intermediaries such as development banks, to domestic agriculture, industry and trade.

If our object is not merely to endow the less-advanced countries with the power to develop continuously but so to endow them that they can overtake the more-developed countries, a large, continuing transfer seems inevitable; and it seems equally inevitable that it cannot take place on commercial terms. For if we are contemplating higher rates of income growth than have yet been experienced we must almost certainly contemplate higher rates of investment than were necessary in the past; and there is nothing in the historical record to suggest that savings-ratios will rise in countries emerging from a desperate state of poverty, not merely to the level of their more fortunate neighbours, but above them.

<sup>1</sup> Swerling, op. cit., p. 34. For example, it stimulates an appetite for wheat, a relatively expensive form of starch.

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