Economic Growth and Underdeveloped Countries

by
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PREFACE

This booklet is an attempt to discuss some of the essentials of economic development in as popular and non-technical a manner as the subject allows. The questions dealt with here are among the most important of the present-day world, since they concern the ability of former colonial and semi-colonial countries to launch out on a course of independent economic development, and the ways of doing this. It is a commonplace to say that such countries occupy a crucial position today in the political arena, and much in world history for the rest of this century will depend on the road which they decide to follow. At present they are handicapped by deep and widespread poverty and economic backwardness, such as is described in outline below. Their consequent weakness tends to tie them to the chariot-wheels of the very imperialism from which they are striving for political independence; and unless this economic weakness can be quickly overcome, they are destined to remain in the toils of so-called "neo-colonialism".

Other burning questions, such as whether these countries can avoid altogether the capitalist road and stage of development, are closely connected with the issues discussed here, although these questions are not followed up in the present booklet. The kind of issue discussed in Chapters 4 and 5, needless to say, is also of crucial importance for the economic policy of socialist countries.

While the writer's intention has been to banish technicalities (and the booklet is not addressed to professional

economists), the reader should perhaps be warned that there is a point beyond which the subject cannot be discussed altogether in everyday language without introducing some novel notions, a few figures and a little arithmetic (of a very simple kind). One might add that a reader may well be unsatisfied if he looks here for a handy compendium to all aspects of a large subject. For brevity there has had to be selection and concentration upon a strictly limited number of issues. But the aspects selected for emphasis are, at any rate, those upon which recent discussion and controversy have mainly focussed.

1

FACTS ABOUT GROWTH

It is a commonplace that all economists are talking about economic growth nowadays, and politicians too. This may not seem at first very surprising. In the first place it would seem to be an obvious enough subject for economists to pay attention to. In the second place, economic growth (or 'progress' as they usually called it) was a central preoccupation of the early economists of a century and a half ago (for example, the work of the so-called 'father of Political Economy', Adam Smith, entitled *An Enquiry into the Nature and Causes of the Wealth of Nations*). Yet until recently economists' attention had been otherwise engaged. For half a century or more before the Second World War their attention had been mainly concentrated upon so-called conditions of stationary equilibrium (amounting to a discussion about whether or not perfect competition produced an ideal or 'optimum' result). And even the heartsearchings and change of intellectual landmarks of the 1930's were concerned mainly with the reasons for unemployment and for economic fluctuations. The shift of focus towards questions of growth and development over the past decade is more significant, therefore, than might at first appear. The reasons for it are not far to seek and will, I hope, emerge in what follows.

But before talking about problems and theories (of which we shall have something to say later), let us take a look at

the facts about economic growth—so far as these can be easily summarised in the language of figures.

A preliminary word of explanation may be called for about the yardstick whereby one measures economic growth. Evidently there are several possible ways of measuring it. Most common is in terms of total industrial output (the various components of which, to be added together, have to be *valued* in some way, *e.g.* in the prices prevailing in some particular year); or alternatively in terms of total national income or national product, which includes agriculture as well as industry, and sometimes also services and trade. If one is thinking of the standard of life, then it will be output *per capita* (*i.e.* per head of the total population) that will be relevant; and if one looks for an index of *qualitative* improvement in production or increase in human potentiality, one will focus attention upon increase in production *per worker* employed, or in labour productivity. Each of these measures may be relevant in a particular context; and none of them can be said to be more 'true' than the rest.

In the history of mankind economic progress or growth is relatively modern. Prior to the arrival of capitalism, societies were comparatively stagnant, as regards the way in which they gained their livelihood. Mainly agricultural (with the addition of a few handicrafts catering mainly for the ruling class and their retainers), these societies changed little over the years, save with the alternation of good and bad seasons, or the incidence of war and disease. This is not to say that such societies were without inner tensions and conflict, and hence changeless. But the time-scale on which change operated was a very long one, compared with what the past two centuries have accustomed us to.

In a much-quoted essay, called *The Economics of our Grandchildren*, the economist Lord Keynes once said:

"From the earliest times of which we have record . . . down to the beginning of the eighteenth century, there was no very great change in the standard of life of the average man. . . . Ups and downs certainly. Visitations of plague, famine and war. Golden intervals. But no progressive violent change. . . . This slow rate of progress, or lack of progress, was due to two reasons—to the remarkable absence of important technical improvements and to the failure of capital to accumulate."

The coming of capitalism, and with it mechanical power and factory production, continuous technical change and accumulation of capital, changed all that. The well-known English historian Macaulay spoke of progress from the last half of the eighteenth century becoming "portentously rapid"; and Marx's remark about the capitalist class in the *Communist Manifesto* may be recalled, that

"the bourgeoisie has played an extremely revolutionary rôle upon the stage of history . . . [it] was the first to show us what human activity is capable of achieving . . . [and] cannot exist without incessantly revolutionising the instruments of production. . . . That which characterises the bourgeois epoch in contradistinction to all others is a continuous transformation of production."

Thus over the past hundred years the growth of world industrial output, measured *per capita* of the population, was several times higher than what had previously been attained in the whole preceding stretch of human history. World industrial output increased by as much as 30 to 40 times over the 100 years, while world population rather more than doubled. By dividing the first by the second we can see that industrial output per head of population increased

between 15 and 20 times. This represented a *per capita* rate of growth of 2·6 per cent per annum, compared with a figure of ·1 per cent or even less in preceding centuries (cf. S. J. Patel in *Economic Development and Cultural Change* (Chicago), April 1961, Vol. IX, No. 3, pp. 316 seq.).

As between different countries there was, of course, considerable variation; and on the whole the older industrial countries grew more slowly than the more recently industrialised. Thus, if we take the period between 1880 and the eve of the First World War, we get the following industrial growth-rates (per annum) for some leading countries:

United Kingdom	2 per cent (approximately)	
France	3 per cent	,,
Germany, Italy, U.S.A.	5 per cent	,,
Sweden, Russia	6 per cent	,,

(Patel, *loc. cit.*, pp. 317–18; A. Gerschenkron in *Journal of Econ. History*, Supp. VII, 1947; League of Nations, *Industrialisation and Foreign Trade*, 1945.)

There is some evidence that at later stages of their industrial development the growth-rate of capitalist countries tends to slacken off. Thus between 1820 and 1860 the British industrial growth-rate was a little higher at rather more than 3 per cent, as compared with the 2 per cent which it has roughly maintained ever since 1880. In the period 1913–58 that of France fell to 2 per cent, of Germany to 2·4 per cent, and of Italy, Sweden and U.S.A. to 3 per cent. Meantime, Japan, as a newcomer on the industrial scene, showed over these same 45 years a growth-rate of 5·4 per cent, or approximately the same as Germany, U.S.A.,

Sweden and Russia had shown before the First World War. In the period between the two world wars growth-rates generally fell to a low level, owing to the severe world economic crisis and depression of the early 1930's. But in the post-Second-World-War period most countries have shown correspondingly higher growth-rates, and some countries (West Germany, Italy and Japan in particular) exceptionally high growth-rates. However, during the past decade there have been signs of slackening growth in U.S.A.: in the latter part of the decade this was only a half or less what it was in the period 1947–53.

It should be noted, however, that most of the countries we have mentioned have shown also a lower rate of increase of population in the present century than they did in the nineteenth. (Thus in U.S.A. it was about 3 per cent per year between 1860 and 1913 and 1·3 per cent between 1913 and 1958; in the United Kingdom in the second half of the nineteenth century population grew by a half, but between 1900 and 1950 by less than a quarter.) Consequently, the growth of industrial output measured *per capita* did not vary very much between the earlier and the later periods.

Whether there is any causal connection between growth of output and increase of population has been the subject of much discussion, into which we shall not draw the reader here. It must suffice to say that one can take the view that there is *some* connection between the two without saying that this is the whole story of why growth is fast or rapid—or even more than a small part of the story. It is obvious that when population is increasing rapidly, the army of potential wage-workers is growing also; and the resulting plentifulness of labour seeking employment will tend to keep wages down. Conversely, with population increasing slowly, the labour army will increase slowly, and capital as it accumulates must of necessity go into more mechanised labour-

saving techniques—into putting more mechanical power behind each human elbow. It follows that growth of output will have to come mainly from raising output per man through improved methods of production, and will accordingly be limited by the capacity of the system for technical innovation. That this kind of consideration is nothing like the whole story is shown by the fact that a reserve army of labour, which the system fails to absorb into employment, may coexist both with a rapidly increasing and with a slowly increasing population. Some statisticians dispute the evidence of any high degree of correlation between growth of output and growth of population. As we shall see, some countries which have the most rapidly increasing populations have a very low rate of economic growth; and the conclusion of a recent statistical study was that there is very little sign of any connection between them. (D. C. Paige, 'Economic Growth: the Last Hundred Years' in *National Institute Economic Review*, July 1961, p. 28.)

An outstanding feature of development in capitalist countries is that it does not proceed smoothly or continuously, but intermittently or in jerks. At best the rhythm of expansion is uneven. This is due to the occurrence of what has been variously called the trade cycle or economic fluctuations or periodic economic crises. Thus the activity of capitalist production and trade fluctuates about the trend of growth in alternate periods of boom and slump. When growth is fairly rapid, booms tend to be prolonged and slumps shortened, and the latter may be no more than an interruption of growth for a few years; but when the growth-trend is itself slow or stagnating, slumps will be equivalently prolonged and their downward movement represent a sharp decline alike of output, employment and incomes.

In addition to the 'decennial cycle' (so called because it is apt to last *about* ten years measured from peak to peak or

trough to trough, sometimes less, sometimes a bit more), some economists have claimed to find a *shorter* cycle or oscillation of three or four years (often called nowadays an 'inventory cycle', from the American term for stocks of goods, which are supposed to fluctuate in alternate periods of building-up and running-down), and some again to find a *longer* fluctuation extending over two or three of the ten-year kind. At any rate, it is clear that because it is an unplanned system, motivated by individual profit-making, growth under capitalism is always irregular and uneven; and what we have said above about average growth-rates over several decades must be treated merely as an *average* of individual years that in themselves showed considerable variation and sometimes retrogression. Of the fluctuations of the trade cycle all one can say is that in years of boom the annual growth-rate often reached as high as 6 or 7 or even 8 per cent for a few years, dropping in slump years to negative figures.

There is one more feature of capitalist development, viewed historically over a century and a half, to which attention must be drawn, if only because it is a matter to which we shall return. It has been a universal feature of such development to date that in the early stages of industrial development production of consumer goods (for example, textiles and clothing) for the home market and for export has led the way and has predominated. Consequently, industrial growth has been limited, to a large extent, by the market for such goods at home and abroad. Only at a relatively late stage of development has the production of so-called capital goods caught up (metals and machines and chemical products used by other industries, and in particular for an expansion of their productive capacity). Thus a German writer who has tried to calculate the relative importance of these two sectors of industry for

leading industrial countries at various dates has reached the following conclusions (W. G. Hoffmann, *The Growth of Industrial Economies*, Eng. edition, Manchester 1958, trans. from the original German edition, 1931). What he calls "the net output ratio between consumer goods industries and capital goods industries" stood at between 4 and 5 in the middle of last century in the case of Britain and Belgium and France; while Japanese industry showed a similar ratio in 1900. U.S.A. in 1850 and Germany in the 1890's showed ratios of 2·4 and 2·3. By the decade of the 1920's the ratio for U.S.A. had already fallen below 1 (*i.e.* the capital goods sector was now larger than the consumer goods sector measured by net output); while in the case of Britain, Germany, France and Belgium it had fallen to 1·5 or below. By the middle of the present century the ratio had fallen well below 1 in the case of Britain, Germany and France also (Hoffmann, *op. cit.*, 71–89, 151; cf. also S. J. Patel, *loc. cit.*, pp. 321–2). A large part (though not the whole) of the explanation of this change is that the more advanced industrial countries increasingly became exporters of capital goods to less developed countries.

It can be seen to follow that in between the earlier period and the later the capital goods sector of industry grew faster than did the consumer goods sector. Some readers may recall Lenin's statement that under capitalism "the department of social production which produces means of production has . . . to grow faster than the one which produces articles of consumption. . . . It is this expansion of production without a corresponding expansion of consumption that corresponds to the historical mission of capitalism" (*Development of Capitalism in Russia*, Eng. ed., 1956, pp. 31–2, 34).

A final word before we close this chapter. If we revert to that general average growth-rate of 3 or 4 per cent per

annum (in Britain and America recently 2 to 3 per cent), we notice a striking historical fact, the significance of which at the present time it would be hard to exaggerate. A growth-rate of this magnitude, large as we have seen it is by comparison with what occurred in pre-capitalist times, is itself small by comparison with what experience has shown a socialist economy, based on social ownership of the means of production and on economic planning, to be capable of achieving. Since 1948 (when the bulk of post-war reconstruction had been completed) Soviet industrial production has risen at an annual rate of some 10 per cent per annum (agricultural production has grown more slowly than this). Other socialist countries, despite some individual variations, have shown comparable rates of growth; China has shown much higher rates, and, according to the U.N. *World Economic Survey 1961*, "between 1950 and 1959 industrial production in the centrally planned economies [including China] increased at an average rate of 13 per cent per annum." Moreover, it is on the continuance of the annual Soviet growth-rate of 10 per cent that the targets of the Twenty Year Plan, announced at the recent 22nd Congress of the Soviet Communist Party, were based (targets designed to overtake the present U.S. industrial level, both absolutely and *per capita*, during the first of these two decades). Indeed, in the period of intensive industrial development in the decade prior to the Second World War, the Soviet rate of industrial growth reached a considerably higher level than this.[1]

[1] According to official figures (based on valuation at prices prevailing in 1926–7, which no doubt yields a larger increase than if prices of a later period were taken), industrial production between 1928 and 1940 grew at 18 per cent per annum. Independent estimates made by D. R. Hodgman in America, on the basis of admittedly incomplete data and by means of alternative valuations, and by F. Seton of Oxford by a different method, have yielded lower figures of 14–15 per cent and 15–16 per cent respectively (for the decade 1928–37). This is about double the figure reached by capitalist countries in rather exceptional boom years.

Small wonder that cold-war propagandists in the West should have tried to play down or to blur this fact, either by stating that Soviet measurement of industrial growth was exaggerated, or by stating that this or that capitalist country (*e.g.* recently West Germany, Italy and Japan[1]), in special circumstances and for a limited period, could grow as fast, or else by spreading a general mood of doubt and scepticism about the whole question.[2] This matter of comparative growth-rates is one to which we shall return.

[1] Since 1953 (up to the time of writing) industrial production in West Germany has nearly doubled, in Italy rather more than doubled and in Japan has more than trebled. But there are signs that these high growth-rates are coming to an end.

[2] The claim made by Professor Walt Rostow (in his *Stages of Economic Growth*) that Soviet growth has been the same as that of other countries at comparable stages of development is because he measures Soviet growth by what is the *lowest* of all the 'Western' estimates, that of the American Professor Nutter (which yields a figure of less than half that of Hodgman and Seton): in addition he takes no account of the devastation and retrogression occasioned by two wars involving invasion of Soviet territory!

2

UNDERDEVELOPED COUNTRIES: WHY GROWTH IS ARRESTED

The older and more developed industrial countries of which we have been speaking so far are confined to a minority of the world's land-surface and of the world's people. They all fall within Europe and North America (save for those overseas offshoots of older countries like Australia, New Zealand and South Africa). By contrast, nearly the whole of the other continents of South America, Africa and Asia remain at a much lower level of economic development, whether this level be measured by absolute size of industrial output, by productivity (per man employed) or by production *per capita* of the population and the standard of living. These vast areas constitute the so-called backward or underdeveloped countries; and of them a well-known modern writer on their problems has said: "That the so-called backward countries of the world make up two-thirds of the human race is in itself a momentous fact that should never be forgotten." (R. Nurkse, *Problems of Capital Formation in Underdeveloped Countries*, Oxford 1953, p. 64.)

These backward areas of the world have been for the most part the traditional colonial or semi-colonial regions—the agricultural, plantation and raw material hinterlands of the big capitalist powers, which have exploited these areas as sources of cheap raw materials and foodstuffs and as spheres

of investment. Historically speaking this has been the main reason for their backwardness. Politically, imperialist control and influence have tended to support and preserve obsolete social and political forms (*e.g.* feudal elements). Economically, foreign investment has tended to go into mining and plantations and raw material processing, or into the development of export industries as a kind of 'enclave' of the imperial metropolis, detached from the rest of the colonial economy, both seeking its markets abroad and sending its profits abroad.

The well-known Polish economist Professor Oskar Lange has expressed the matter both forcibly and clearly in this way. Posing the question, "what made the capitalist way of development impracticable to solve the problems of underdeveloped countries and made these countries embark upon other roads of economic development?", he answers the question as follows:

> "Monopoly capitalism and imperialism made it impossible for the underdeveloped countries to follow the traditional path of capitalist development. This is so for a number of reasons. . . . The most important is this: with the development of large capitalist monopolies in the leading capitalist countries, the capitalists of those countries lost interest in developmental investment in the less developed countries, because such investment threatened to cause competition with their established monopolistic positions. Consequently investment in underdeveloped countries of capital from the highly developed acquired a specific character. It went chiefly into the exploitation of natural resources to be utilised as raw materials by the industries of the developed countries, and into developing food production in the underdeveloped countries to feed the population of the developed

capitalist countries. . . . In consequence the economies of the underdeveloped countries became one-sided, raw material and food-exporting economies. The profits which were made by foreign capital in these countries were used not for reinvestment in these countries but exported back to the countries where the capital came from. . . . These profits were not used for industrial investment on any major scale, which we know from experience is the real dynamic factor of modern economic development. This is the essential reason why the underdeveloped countries were not capable of following the classical capitalist path of economic development." (*Economic Development, Planning and International Co-operation*, three lectures to the Central Bank of Egypt, Cairo 1961.)

Since the Second World War many of these countries have shaken off their former colonial status, wholly or partially, and (where they have not become satellites of America) have followed policies of political and economic independence. Yet they are still beset with problems of backwardness and find it difficult, even with the aid of some State intervention and State investment, to achieve a growth-rate as high as that of advanced capitalist countries. It is upon the problems of their continued backwardness that most of the discussions of economic development of the past decade have been focussed.

This continued backwardness has partly been by reason of the continuing heritage of imperialist rule, for example the persistence of feudal elements and habits. But it is partly also that, with a wretchedly low standard of life, there is no more than a narrow and restricted home market to encourage private capitalists to invest in industry. Moreover, in the absence of a comprehensive development plan, and active initiative by the State to carry this into effect, investment

in industry has too many uncertainties to be attractive for the capitalist entrepreneur; and private capital finds it more profitable to go into trade (particularly export trade or trade in imported luxuries), into land-purchase and speculation, or into luxury building. (See, for example, the reference to South American experience and the tendency there for private savings to go into the building of luxury residences, in the United Nations publication *Processes and Problems of Industrialisation in Underdeveloped Countries*, p. 34.)

The result of this economic backwardness of the colonial or ex-colonial regions of the world is a large and increasing inequality on a world scale—inequality in productive capacity and equipment, in rates of growth and in living standards. Professor Nurkse, whom we have already quoted, gives the following table to illustrate the situation as it existed in 1949 (Nurkse, *op. cit.*, p. 63):

	Percentage of World Income	*Percentage of World Population*	*Annual* per capita *income (in U.S. dollars of 1949 purchasing power)*
High Income Countries	67	18	$915
Middle Income Countries	18	15	$310
Low Income Countries	15	67	$ 54

Of these three groups of countries, the top group covered U.S.A., Canada, Western Europe, Australia and New Zealand; while the lowest covered most of Asia, Africa, South-east Europe and Latin America.

For a more recent date (1957) the following shows the relative *per capita* income for the main regions of the world. (These figures are based on estimates by M. Usui and E. E. Hagen, *World Income 1957*, M.I.T. Centre for International

Studies, Cambridge, Mass., November 1959, which are reduced to index-number form with the world average *per capita* income = 100.)

	relative per capita *income 1957*
U.S.A.	620
W. Europe	193
Latin America	75
Middle East	45
Africa	29
Asia	29
[World average	100]

From this it appears that *per capita* income in U.S.A. is more than twenty times and in Western Europe between six and seven times what it is in Africa and Asia. Reverting to the earlier date (1949), two authors of a well-known textbook on development summed up the position thus: "Of the two billion [i.e. European milliard] people in countries for which estimates of national income were available in 1949, over two-thirds had *per capita* incomes of less than 55 dollars [or about £20]. The great majority of the world's people are in constant struggle against poverty" (Meier and Baldwin, *Economic Development: Theory, History, Policy*, New York 1957, p. 10).

Moreover the rate of growth of national income in the poor countries is apt to be little if at all greater than a half what it is in the richer countries; and in many of the former it barely keeps pace with the increase of population. Consequently the disparity between the advanced industrial countries and the underdeveloped tends to increase; and available evidence shows that this inequality on a world scale has in fact increased during the present century.

Another way of looking at the inequality is to take the

distribution of productive power. Thus of the world stock of agricultural tractors as it existed in the middle 1950's, 68 per cent was in North America and 23 per cent in Europe; whereas in the whole of Africa there were only 2 per cent, in Latin America 3 per cent and in the Near and Far East combined only 1 per cent. Similarly of world supplies of nitrogeneous fertilisers, Latin America received only 4 per cent, countries of the Near East 3 per cent and Africa 1 per cent. Of installed electrical power-capacity over two-thirds was in the leading industrial countries of North America and Western Europe, and under 9 per cent was in the underdeveloped countries. Of the total output of electricity (in kilowatt hours) less than 7 per cent was in underdeveloped countries (Meier and Baldwin, *op. cit.*, p. 280; U.N., *Processes and Problems of Industrialisation in Underdeveloped Countries* (New York, 1955), p. 12, Table 1).

As regards foreign trade, a characteristic weakness of many underdeveloped countries is that their export trade is heavily reliant upon one or two products. This is, indeed, one of the main ways in which one-sided development of these economies expresses itself; and in turn it reinforces and perpetuates this one-sidedness. Thus copper accounts for a half of Chile's exports, rubber for nearly a half of Malaya's (and rubber and tin together for two-thirds), cotton, jute and tea for 47 per cent of Indian exports, coffee for 45 per cent in the case of Brazil, rice for 45 per cent in Ceylon, sugar for 44 per cent in the Philippines and cotton for 70 per cent in Egypt. This means that they are very vulnerable to market fluctuations in the case of a main product; and it may also constitute an obstacle to any attempt to provide the means of industrial development (*e.g.* through imports of machinery) by expanding foreign trade, since any sizeable expansion of foreign demand for these export products may only be possible if export prices are substantially cut—

price-cuts that may defeat the object of raising additional foreign currency with which to finance additional imports.

What price-changes of primary products may mean for such countries is indicated by the following calculation. It has been estimated in a report of the U.N. Economic Commission for Asia and the Far East that a change of only 5 per cent in average export prices would be roughly equivalent to the annual inflow of private and public capital and of government grants to underdeveloped countries lumped together. Yet between 1948 and 1956 the actual annual fluctuation averaged over 10 per cent for a whole range of products; and the drop in commodity prices during 1957–8, when combined with the rise in the cost of industrial goods that they imported, is estimated to have cost underdeveloped countries some $1½ milliard in twelve months. The trend of primary product prices in recent years has been downwards, and they stand today at a level some 20–25 per cent lower than in the early 'fifties.

In addition to abysmal poverty, a fairly common feature of underdeveloped countries (at any rate in Asia and in many Latin American countries) is the existence both of a high population density in relation to area of cultivated land and a large surplus of manpower, unemployed or underemployed (working only seasonally, for example, at the harvest peak or for a few hours each day or a few days each week). In the towns there is similarly a pool of unemployed or irregularly employed, composed of landless persons or of members of peasant families forced by debt or hunger to migrate to the towns in search of employment. In India, for example, it has been estimated that urban unemployment and underemployment amounts to more than a fifth of the urban labour force, and in the four largest cities it rises to nearly 40 per cent. (B. Higgins, *Economic Development*, p. 44.) Agriculture is characterised by very

small family holdings (apart from a few large estates, such as tea plantations in India, rubber plantations in Malaya, coffee plantations in Brazil). Mostly these holdings are too small to yield a livelihood to those living on them—holdings worked by primitive implements with inadequate means of irrigation and manuring, so that, despite the amount of labour devoted to them, their yield per acre is very low. Primitive crop-rotation and inadequate manuring may even lead to soil exhaustion and deterioration of yields. Low productivity leaves little margin for improvement or for reserves against bad seasons; and the accompanying malnutrition means greater incidence of disease and lowered working efficiency and initiative. This is one of several 'vicious circles' in which poverty and backwardness in underdeveloped countries have become enmeshed.

The majority of these dwarf holdings in agriculture represent what is called 'subsistence economy' (barely-subsistence might be a more fitting word). Except under pressure of the need to pay rent and taxes, they produce no surplus for the market. Hence the supply of agricultural products to the towns and for industry is apt to be a restricted one; and if measures are undertaken to improve agricultural productivity, this may not enlarge the marketed surplus of agricultural produce—the extra productivity may be absorbed either by more consumption in the village or by an addition to the reserve of underemployed manpower. This is apt to constitute a crucial 'bottleneck' limiting the growth of industry. Even if industrial expansion is speeded-up successfully (*e.g.* under a State development plan) and increased employment is afforded in the towns, the resulting transfer of labour from overcrowded agriculture to industry may fail to be matched by an equivalent and parallel movement of agricultural products from village to town. Accordingly expansion of industrial employment, and with it of urban

demand, may be confronted by an inelastic supply of agricultural products; thus facing planners with the alternative of a sharp rise in foodstuff prices or else the import of foodstuffs from abroad. In these circumstances a change in the social and economic organisation of agriculture itself may prove to be an essential condition of industrial development.

Today it is becoming fairly widely recognised that without measures of economic planning the development of industry and a faster rate of growth in the underdeveloped countries will not be achieved. But in a capitalist economy, where initiative in investment and development rests with private firms and individuals, with their eyes upon markets and profit margins, the mere existence of a plan on paper may mean remarkably little. Development will still be subject to the kind of limitations and obstacles we have mentioned; and without the means of implementing them, the plan-targets may remain pious hopes that are unrealised in practice. Thus the State may be able to influence the situation in various ways, through monetary policy, taxation and a few controls. But these are essentially indirect instruments, and in the circumstances of most underdeveloped countries weak and brittle instruments at that. To provide the lever and impetus to development a substantial volume of State investment is necessary, and with it a substantial public sector of nationalised industry and public services. The profits of this public sector can provide the financial means for extended investment; such investment can be directed towards key points in the economy where its influence in overcoming obstacles and bottlenecks and in stimulating expansion elsewhere is greatest; and in this way the impetus to development once launched can be sustained.

But history does not stand still; and such a possibility very soon confronts such countries with a crucial issue. The

sharp alternative with which underdeveloped countries are being increasingly faced today is whether or not to opt consciously for a socialist type of development policy. Should they follow the traditional capitalist road, which, if relapse into stagnation is to be avoided, will mean reliance on foreign capital and subordinating development to the sectional interests of monopoly capital, or take a socialist road and have development consciously planned in the interests of the country's all-round development and of its people as a whole?

3

SOVIET DEVELOPMENT

Quite early in the 1920's, as soon as reconstruction from the ravages of civil war and the war of intervention had been completed, the Soviet Government had adopted a policy of industrialisation as the only way of extricating Russia from poverty and backwardness, and as the essential basis for a transition to socialism. There had been some development of industry towards the end of the nineteenth century and in the years preceding the First World War—textiles north-west of Moscow and some coal and iron (largely to meet the demand from railway building) and a little engineering in the southern Ukraine (also in St. Petersburg, the then capital), some mining in Siberia and oil-extraction in Baku and the trans-Caucasus. There had been extensive railway building, including the trans-Siberian, around the turn of the century. We have seen that from 1880 onwards the growth of industrial output attained a level as high as that of Sweden (even reaching 8 per cent for a short time in the boom years of the 1890's). Much of this industrial development was financed by foreign capital, and was with the aid of foreign managerial and technical personnel; about a half of the capital in the Donetz coal basin in 1914 being foreign and more than four-fifths in iron-mining, metallurgy and oil.

Yet despite this pre-war development the total number of workers employed in factory industry at the time of the

First World War numbered only 2 to 3 million—a figure raised to between 4 and 5 million if we add railway workers and miners. Many factory wage-earners, and especially miners in south Russia, retained links with the village and returned there to assist their families at the harvest season. Handicraft workers were twice as numerous as workers in factories; and well over four-fifths of all the population lived off the land. Thus industry still represented no more than small 'islands' in a predominantly backward agricultural country. Apart from some large landlord estates, the agricultural area consisted of small peasant holdings, inadequately equipped, cultivated by primitive methods and of low yield (below that of Italy, about a half that of France and not very far above the level of India). There was also rural overpopulation—pressure of population on the available cultivated area—estimated by a Soviet economist in the late 'twenties at between 8 and 9 million. Yet agriculture, along with mining, oil and timber, provided the bulk of her exports; Russia at that time being one of the world's leading grain-exporters, and her imports consisting of manufactured goods and industrial raw materials. Thus in major respects Russia bore the characteristics of a backward country, as we described them in the previous chapter.

But although the principle of industrialisation was adopted by the Soviet Government at a relatively early date in the 'twenties, it took some years before the detailed policy whereby this could be carried into effect was hammered out and agreed upon, and then finally embodied in the First Five Year Plan in 1928. Nor was this crucial policy decision reached without several years of intense discussion and debate which occupied the middle and later years of the 'twenties.

In these discussions there were two basic and connected

issues. From what source could investment funds be drawn for expanding industry and reconstructing it on a higher technical level, thereby increasing the productivity of labour? Such an increase in the productivity of social labour was obviously an essential pre-condition for raising the standard of life—having more consumable products per head of the population. But to increase it required the building of new industrial plants (or reconstructing old ones) and equipping them with new and up-to-date machinery. To do this required metal; and unless the machinery in question was procured from abroad (and of this the possibilities were very limited for both economic and political reasons), this required a rapid increase in the number of iron and steel plants and the creation of a complex engineering industry. To import machinery even for a few years, to tide over the first stage of expansion, meant finding ways of expanding the export of grain (the leading export-product) in order to procure the foreign currency with which to pay for additional imports (since foreign loans on any adequate scale were out of the question). How do this without either diverting foodstuffs from the home population and lowering their already-meagre standard of life, or somehow putting pressure on peasant farmers to produce more and to place this extra on the market? Indeed, if industry and industrial employment were to expand, *more* foodstuffs (and also raw materials like cotton) would anyhow be needed to feed the larger working population in the towns.

It was at this point that the second crucial issue came into the discussion: namely, the relation between the Soviet State (together with socialist industry) and the peasantry. Lenin's principle throughout the revolution and civil war and period of recovery after the war had been one of a firm alliance between industrial working class and peasantry (*i.e.* the poor and middle peasants who constituted the

overwhelming majority). Would not this alliance be ruptured if too much political and economic pressure were exerted on the peasantry to provide, from their labour and their own narrowed consumption, the wherewithal for industrial expansion (as some at the time were advocating)? In a crucial respect the existing position was particularly grave. The marketable surplus of grain was actually smaller than it had been in pre-revolutionary days—smaller by as much as a half. This was because the land reform of 1917 had redistributed the land of landlords and large farmers (*kulaks*) among the poorer peasantry, and greater equalisation in the village had resulted in peasants consuming more of what they grew. If encouragement were given to the richer, *kulak* farms to buy or rent more land and employ labour in order to produce a surplus for the market, this would be encouraging a rebirth of capitalism in the countryside—of a class of rich 'improving' farmers, accumulating capital and taking to trade and moneylending, as have embryo capitalists from the ranks of peasant producers the world over.

Granted, however, that some way out of this *impasse* could be found, a policy of industrialisation was immediately confronted with another issue. We have seen that the traditional pattern of development for capitalist countries in the past was to develop first of all consumers' goods industries, such as textiles or clothing or food processing; only switching over to a more rapid expansion of capital goods industries at a fairly advanced stage. This has come to be known as the policy of 'textiles first'. In the absence of a developed heavy industry (fuel and metals and engineering) the majority of countries relied in the early stages on importing machinery from abroad with which to equip their new industries, as they also imported iron and steel for their railway building. Was this the correct pattern for imitation

by socialist industrialisation? Or was there some alternative way?

If the peasantry had to be wooed rather than coerced into providing a larger marketed surplus of raw materials and foodstuffs, it might seem that the traditional pattern was the right one; since the only way of tempting a peasant to sell more grain or cotton was to offer him more industrial goods in return, and to make this possible an expansion of light consumer goods industry was a priority. There was a powerful school of thought (the so-called right-wing tendency) which advocated this line. It was a line of cautious and relatively slow development, in the course of which a careful balance must be preserved between agriculture and industry, production of more consumer goods on the one hand keeping in step with a quickened flow of agricultural products from village to town.

The final solution adopted is now sufficiently familiar to have become widely known as the Soviet way of industrialisation. It was, in the first place, to combine a high rate of industrialisation with a drive for collectivisation of agriculture—for the merging of individual peasant farms into large-scale co-operative or collective farms. Thereby a solution was provided for two problems. Individualist peasant agriculture, with its primitive methods and low yields and its constant threat of a reborn capitalism *via* the generation of an upper *kulak* stratum, was replaced by a collective or socialist form of agriculture. At the same time the basis was laid for mechanisation and an enlargement of the marketed surplus. Industrial development, on the contrary to being slow and cautious, was planned to take place at an ambitiously high rate. The impetus of development was not to be allowed to peter out; on the contrary it was to be generated and sustained by a campaign to which the leading personnel in industry at all levels and the full membership of the Party

were mobilised. Moreover, the traditional pattern of development was discarded, and instead of light industry taking the lead, priority was given to the construction of heavy industry—electrification, iron and steel and machine-building. The reason for this novel order of development, as we shall see later, was that by enlarging the productive capacity of the metal, power and machine-making industries the possibility of future expansion in all branches of the economy was thereby being enlarged.

Some idea of the expansion achieved in the first crucial pre-war phase of industrialisation can be gauged from the following rates of growth of certain key products (all of them measurable in physical units). Over the decade from 1928 to the end of 1937, covering the first two Five Year Plans, generation of electrical power increased between 7 and 8 times, the output of iron and steel by 4 times, of coal 3½ times, of oil by rather less than 3 times and of cement 3 times. The building of a complex engineering industry, capable of manufacturing a wide variety of new machines, was also a leading achievement of this period: its rate of growth (which cannot be measured in physical units because of the variety of its products) was much greater than that for the basic products we have mentioned. Other quite new industries, like motors and aircraft and some non-ferrous metals such as aluminium, were launched for the first time in this heroic decade of great sacrifices and great endeavours. Meanwhile consumer goods industries like textiles and clothing expanded at a considerably lower rate than capital goods—at a rate substantially less than a half that of the latter.

Despite the ravages of war and invasion, which set back the Soviet economy by at least eight years and exacted an immense toll of human life and suffering, the output-capacity of standard products like coal and oil and electricity and

steel stands today at between 10 and 20 times the level of 30-odd years ago at the time of the launching of the First Five Year Plan. Since, to get a true picture of the rate of growth, we have to exclude most of the war-decade of the 'forties, this has to be regarded as the achievement of two and a half decades of peace-time construction. (This is an allowance which we have seen that some American commentators, such as Rostow, do not make; averaging as they do the increase between base-date and end-date over the full 30 to 35 years.) We have said that since the end of post-war reconstruction industrial production has expanded at an average rate of 10 per cent annually: an expansion which has laid the basis for the present long-term aim (in the 20-year long-term plan) of overtaking "the strongest and richest country, the U.S.A., in production per head of the population". Meanwhile, in the course of the 'fifties, as a result of the advances of the pre-war decade in basic industries, the level of consumption has markedly increased; and although the growth-rate of the capital goods sector has been maintained at a higher level than for consumer goods, the gap between the growth-rate of the two sectors has been very much narrowed. Since 1953 the previous lag in agriculture has been overcome;[1] between that year and 1960 agricultural production rising by some 60 per cent.

The following table summarises the comparison of some leading products between 1928 and the present time (*i.e.* 1962 as the last complete year at the time of writing). For purpose of comparison figures are inserted also for the pre-war year 1940 and for 1950.

[1] Owing to serious mistakes in policy with regard to price-incentives to farmers, some branches of livestock, especially cows, were at a low level in the early 'fifties. Actual grain supplies were found to have been much below the previous official figures (which were inflated by a method of estimation which made no allowance for harvest losses); subsequently revised figures were issued based on so-called 'barn-yield'.

	1928	*1940*	*1950*	*1962*
Steel (m. tons)	4·3	18·3	27·3	76·3
Coal (m. tons)	35·5	166	261	517
Oil (m. tons)	11·6	31	37·9	186
Electricity (md. kilowatt hrs.)	5·0	48·3	91·2	369
Mineral Fertilisers (m. tons)	·13	3·2	5·5	17·3
Motor Vehicles (thous.)	·84	145	363	578
Tractors (thous. units)	1·3	31·6	108	287
Cement (m. tons)	1·8	5·7	10·2	57·3
Leather Footwear (m. pairs)	58	211	203	456
Cotton Cloth (m. sq. metres)	2678	3954	3899	4900
Woollen fabrics (m. sq. metres)	86	119	155	469
Linen fabrics (m. sq. metres)	174	285	282	485
Silk fabrics (m. sq. metres)	9·6	77·3	129·7	787
Grain (m. tons)	73·3	95·5	81·2	147

4

SOME PROBLEMS OF INVESTMENT

Since the Second World War, and particularly during the past decade, there has been a great deal of discussion at various levels about growth and development with special reference to the problems of underdeveloped countries. This has ranged from United Nations reports about particular problems or regions and discussions of development plans in countries like India to debate among theoretical economists about rival 'growth models' or rival principles of investment-policy. There has also been quite a spate of textbooks on the subject in recent years, emanating particularly from America.

Running through these discussions, even the most theoretical of them, have been certain highly practical issues, such as those we have already alluded to. In the first place, there has been the issue as to whether to leave development to the initiative of private capitalists, in the traditional manner, aided perhaps by some foreign lending and technical aid to underdeveloped countries under the umbrella of international bodies (often *de facto* American-dominated) such as the World Bank; or whether planning in some degree by the State and by government organs is necessary. I think one can say that the majority of economists who have joined in the debate adopt the latter of these two positions. But there remains a powerful minority (especially in U.S.A., and to a less extent among 'Western-trained'

economists in underdeveloped countries) who are hostile to any encroachment on a 'free market' economy and to any considerable enlargement of the scope of State expenditure and investment. This, they say, will discourage private initiative, scare away foreign capital, and lead to 'uneconomic' policies and to waste—not to mention giving countenance to 'dangerous thoughts' about economic planning. (A well-known American economist recently advocated that foreign economic aid to India should be terminated because it was being used to underwrite Indian planning.)

In addition to this broader issue of planning *versus* free market, State *versus* private investment, there is the question of the general lines which development, planned or unplanned, should pursue. Should it pursue what we have described above as the traditional policy of capitalist countries in the past, proceeding cautiously to invest first in agriculture and agricultural processing industries, then in light consumer goods industries for which there is an immediately available market, and only much later in highly mechanised modern techniques and in heavy industry? Or should it, rather, pursue what has come to be known as the Soviet way and order of development?

In this question of the pattern of development a number of distinct though connected issues are involved: the relative importance to be assigned to foreign trade and to mobilising internal resources, especially surplus labour; the order of priority to be assigned to different industries or sectors—their relative rates of growth at particular periods; and the choice of technique, or of methods of production, in the economy at large and in particular industries. These are issues which it is difficult to size-up clearly without entering into theoretical reasoning (and in the course of it adopting certain theoretical simplifications to enable one's mind to focus upon essentials). But before doing so it might be as

well to take a look at one or two general notions that have been common currency of theoretical discussion, and to clear away some misconceptions that have been fairly widespread.

Firstly, and most familiar, is the notion of the rate of investment, usually expressed as the ratio of current investment to total income or output: *i.e.* the proportion of resources devoted to *adding* to the existing stock of capital equipment, plant and buildings, and of working capital (stock of goods, including semi-finished production). In the form in which it has just been stated, the ratio refers to *net* investment (or new investment) and is equivalent to the output of the capital goods industries (*plus* additions to working capital) *over and above* what goes to *replace* worn-out equipment or used-up stocks. It needs, therefore, to be related to *net* national income or output: *i.e.* total output (or income) after deduction for capital depreciation and for stocks of working capital run down during the year in question. Sometimes, however, one finds both quantities expressed *gross*, instead of *net*: *i.e.* investment includes the whole output of capital goods, whether destined for replacement and maintenance or for additions to the existing stock of capital, and is related to total output or income *without* any deduction for current depreciation.

To illustrate the difference between the two, one may point out that in absolute size net investment in U.S.A. is about half the size of gross; in U.S.S.R. it is about two-thirds. Obviously gross investment is likely to be larger relatively to net (other things being equal), the larger the stock of capital in existence, since the size of total replacement and maintenance will depend on the size of this existing stock.

This investment-ratio, whether net or gross, varies considerably in different cases, and this variation will be *one* of the reasons for differences in growth-rate. In this country

the rate of net investment is commonly estimated to have been in recent years around 8 to 10 per cent, which is considered to be on the low side as compared with other countries of Western and Northern Europe: in India about 7 per cent; in the U.S.S.R. as high as 27 per cent (for 1959). One difficulty in defining at all precisely net investment as distinct from gross is that, when old plant or capital equipment is replaced by new, of modern and improved type, productive efficiency is almost certainly increased. How is one to measure the degree to which the change represents merely replacement of old by new equipment or additional *new* investment in extended productive powers?

Secondly, there is the notion of the capital coefficient or capital-output ratio (or sometimes called the investment-output ratio). This expresses simply the relation between the value of the capital used[1] in a particular line of production and the value of the output measured over a certain period (the period usually taken being one year). It will vary from industry to industry, and also change over time, *e.g.* as a result of technical change and the precise character of technical change.[2] As a ratio for a country as a whole, it

[1] Sometimes one finds it interpreted as the ratio of *fixed* capital (only) to output; omitting working (or circulating) capital from the reckoning. In recent Soviet writing, for example, the term *fondoemkost* of output is usually used in this sense (*i.e.* as the ratio of so-called 'basic funds' to output); analogously the term *fondovooruzhennost* of labour usually referring to the ratio of 'basic funds' to labour. Working capital may be anything from one-fifth to one-third of total (net) investment; and accordingly the inclusion of it may make the capital-output ratio larger by something between a quarter and a half.

[2] Its connection with the capital-labour ratio (roughly, but not quite, equivalent to Marx's 'organic composition of capital') is that the capital-output ratio=capital-labour ratio divided by the productivity of labour. Thus, if a change occurs in the direction of more mechanised production, the capital-labour ratio is likely to rise. Let us suppose that it is doubled. Then if labour productivity is also doubled as a result of the new method of production, the capital-output ratio will remain unchanged; but if labour productivity is less than doubled, the capital-output ratio will rise.

represents an aggregate of numerous different ratios for particular industries; and one has always to remember that this aggregate ratio may be high or low according to which industries preponderate in the country in question. The ratio may be affected by the intensity with which capital equipment is utilised. If some of it is standing idle or is only used intermittently (in other words, there is excess capacity), it will tend to be on the high side. If on the contrary the equipment is used round the clock on a system of multiple shifts, it will tend to this extent to be low. For this reason it may vary between years of boom and years of depression, and one would be unwise to regard it as something unchanging and unchangeable. Professor Oskar Lange for example has pointed out that it is likely to be much lower in socialist countries than in capitalist because planned economies can eliminate excess capacity and maintain a more constant output-flow close to the full-capacity level. (Lange, *Introduction to Econometrics* (Warsaw and London, 1959), p. 288. His calculation for Poland in 1950–5 is as low as 1.)

For advanced capitalist countries like those of Western Europe and America, this ratio is commonly calculated as having a value of about 3 or 4. This means that £3- or £4-worth of productive capital will be needed to produce each £1-worth of annual output; or the investment of an additional £100 will on the average increase annual output or national income by between £25 and £33 6*s*. 8*d*. (This is on the assumption that there is no difference between what is called the 'incremental' (or investment-ratio) and the 'average' ratio.) For some Asiatic countries in post-war years this ratio has been calculated as follows: Japan 4·7, Ceylon 2·6, India 2·3, Malaya 2·3. (*Programming Techniques for Economic Development*, U.N. Econ. Commission for Asia and the Far East (Bangkok 1960), p. 11. It is here added

that "a better use of already existing idle capacity may have been responsible for the low values found for Ceylon, India and Malaya".)

An equation much referred to in modern growth-theories states (what has been called "a simple arithmetical truism") that a country's *growth-rate will equal its investment-ratio divided by its overall capital-output ratio*. Thus let us suppose that the national income of a certain country is equal to 100 (which could stand for millions or milliards of pounds, dollars, lire, rupees or pesos) and that, its net investment ratio being one-tenth, it invests annually an amount equal to 10. If the capital-output ratio is 4, this annual investment of 10 will result in an annual addition to the national income of $2\frac{1}{2}$: *i.e.* $\frac{10}{100}$ divided by $\frac{4}{1}=\frac{2\frac{1}{2}}{100}$. Had the capital-output ratio been only 2, the resulting growth-rate would have come out at 5 per cent.

To come now to misconceptions. The kind of calculation we have just made is often used to draw pessimistic conclusions about the possibility of backward countries raising themselves at all rapidly from their backwardness by their own efforts. The conclusion is then drawn that they can only break the 'vicious circle' of backwardness and poverty by attracting foreign capital and foreign aid, and hence accepting the requisite political conditions (no discouragement of private enterprise by taxation policy or 'socialistic measures', etc.). Development under these conditions is presented as the only alternative to a dictatorial régime which ruthlessly depresses the already low standard of life by draconian measures. It is curious, when one reflects, how often arithmetical truisms have been used to demonstrate reactionary conclusions!

The argument runs something like this. Suppose that population is increasing at 2 per cent per annum, which is not an unusual rate for such countries (in Latin America it

is 2·5 and in the Middle East 2·3); and suppose a capital-output ratio of 3. The country will have to save and invest 6 per cent of its national income merely to keep pace with population-increase and to prevent the standard of life from falling. To maintain a growth-rate of 5 per cent, and hence raise output per head by as little as 3 per cent per annum, will require the investment annually of 15 per cent of its national income—a very high percentage, and hence heavy burden, for countries of Asia or Africa with such very low output per head and already so near the starvation-level.

There is a rather obvious answer (or at least partial answer) to this: that in most underdeveloped countries there are large inequalities of income, and hence a substantial amount of parasitic consumption by feudal and other well-to-do elements (a lot of it of imported goods) which could be reduced if appropriate governmental measures were adopted. Professor Paul Baran has written: "The principal obstacle to rapid economic growth in the backward countries is the way in which their potential economic surplus is utilised. It is absorbed by various forms of excess consumption of the upper class, by increments to hoards at home and abroad, by the maintenance of vast unproductive bureaucracies and of even more expensive and no less redundant military establishments." (*Political Economy of Growth*, New York 1957, p. 228.) Moreover, there are often untapped resources and forms of waste; and these resources could be mobilised for investment by a government not too tender about existing vested interests. But it is another, and perhaps less obvious, consideration to which I want to draw attention.

What I have termed the 'pessimistic view' takes it for granted that, in order to have rapid development, consumption must be depressed absolutely in order that the investment-ratio may be raised. This is a purely static view; and

derives from the habit of looking at things at a given point of time, with a given total income to be divided in certain proportions between consumption and investment. What this static view overlooks is that development depends quite as much (and in the long run much more) on what is done with the *increment* of national output, however small this may be to start with, than on whether the *initial* rate of investment (and hence rate of growth) is large or small. In other words, it is the *rate of increase of the increase*—the capacity of the growth-rate itself to grow—that really matters. It is *how you use* the investible surplus you have and how you harness its results that is crucial, rather than its initial size in Year One.

True, using the increment for rapidly stepping-up development involves *not* using it to increase consumption for the time being. But to *postpone raising* consumption here and now in order to be able to raise it more rapidly later is a different thing from *reducing* consumption here and now which the defeatist view sees as the only possibility. From a planning standpoint, as we shall see in the next chapter, this appears essentially as the question of how to distribute investment between industries which make capital goods and industries which make consumer goods.

All this is remarkably simple and obvious once it is stated. Yet it has been perversely overlooked in the past. So much so as to make one speak of it as a 'new' way of looking at development, and one requiring a quite radical mental adjustment on the part of those grown accustomed to the old habits of thought. By contrast, the old outlook is part of the outmoded notion that 'saving' (regarded as a painful shrinkage of consumption) must always precede and condition growth. Instead one has to get accustomed to thinking of the increment which growth yields being used in various ways, with varying effects on growth in the future.

The new view (born, I believe, from looking at things from a planning-standpoint) holds out an altogether more hopeful perspective.

If arithmetic has been harnessed in the past to pessimism and defeatism, let us use it for once in the service of optimism by putting the matter in the following way. One can say that a more hopeful perspective follows from what has been called "the staggering force of compound growth at higher rates" (S. J. Patel, *loc. cit.*, p. 321; another, Lord Keynes, once spoke of its power over long periods as being "such as to stagger the imagination": in *Essays in Persuasion*, p. 361). To give a simple example: if we start with any quantity (which may be national income or the investible fund available at some starting date) and it grows at 2 per cent annually, then at the end of 10 years it will only be larger by a little more than 20 per cent and at the end of 20 years by 50 per cent. Even at the end of a century it will only have increased by about 7 times. If we can raise the growth-rate to 5 per cent, it will grow by more than a half of itself in one decade and by more than $2\frac{1}{2}$ times in two decades, while by the end of a century it will have grown 130 times. If, however, the growth-rate could be stepped-up to 10 per cent, our initial quantity (national income or investible surplus) would increase more than $2\frac{1}{2}$ times in one decade and by 6 or 7 times in two decades—and in a century by several thousand times. (Perhaps one should explain that it is not being suggested that one should wait for a century, or even for a quarter of it, to raise consumption: the point of the arithmetic is simply to show that once you have achieved an adequate growth-rate by ploughing back the increment, there will very soon be an ample margin for increasing both consumption and investment at the same time.) Once one had succeeded in raising the growth-rate to 15 per cent, national income would double

every 5 years, quadruple in 10 years and increase 16 times in 20 years. A little extra effort and drive in the early years of industrialisation may therefore yield a very large harvest within a decade or two from which consumption may be substantially raised.

The lesson of this is not, of course, that it will be all that easy to jack-up the growth-rate to a sufficiently high figure —that it is achievable by an automatic process set in motion by a wave of the hand. Geometric progression is not a new form of magic. To raise the growth-rate to an adequate level and to maintain it there for a decade or two decades without a relapse into stagnation almost certainly requires planning (and by this I mean not just planning-on-paper); and it requires the appropriate type of political and social organisation capable of inspiring human endeavour and mobilising economic resources to the desired ends, especially in the early years of the 'push off'.

5

SOME THEORETICAL PROBLEMS FURTHER CONSIDERED

Until recently economists were quite certain that the traditional capitalist pattern of development was the economically rational one. By implication the Soviet way of development was regarded as irrational and uneconomic, involving waste of resources and grave damage to human welfare. It represented a too-hasty jumping over stages through obsession with Marxist ideology or for reasons of national aggrandisement. The kindest explanation was that the Russians were forced to do things in a hurry because of the danger of war. But such a reason did not make it a good pattern for imitation by underdeveloped countries in peace time.

In United Nations publications after the war about underdeveloped countries, in American textbooks on development, in articles in learned journals a particular theory was propounded: a theory which claimed to establish principles simultaneously for the choice of methods of production, for the growth-pattern of different industries and sectors and concerning the successive stages through which development must pass. One need hardly say that the emphasis of this doctrine was on caution and conservatism. It soon hardened into a dogma; and to many appeared as so direct a corollary of accepted economic theories and so buttressed with simple commonsense appeal as to be

extremely difficult to reject. Any doubts about its soundness were quickly answered with the statement that it was only pointing out the obvious way in which scarce resources could be used most effectively and scarce investment funds made to go furthest. What man in his senses could wish to reject such advice?

Briefly, what the doctrine so plausibly maintained was this. An underdeveloped country is apt to be characterised by acute scarcity of capital and (as we have seen) by surplus labour. In these circumstances new investment funds must be sparingly used and used with maximum effect—maximum effect in harnessing surplus labour to employment and in increasing the national product. This could best be achieved if investment were devoted, not to expensive machines and the latest and most streamlined technical processes, but to equipping labour with the cheapest possible implements; since with limited capital more of these implements could be used and with their aid more labour be employed. Consequently total output would be made larger. Thus, instead of supplying a relatively small number of tractors and combines to agriculture, it would be more economical to supply a host of spades capable of employing a lot of labour at a relatively low level of productivity.

It also followed that those industries must be chosen for development which require relatively little capital compared with labour (a low capital-labour ratio, or in Marx's language a low organic composition of capital). Thus in the first stage, at least, handicrafts or 'cottage industries' were preferable to factory industry equipped with modern machinery, and light industries to heavy industry, especially as the former were quicker-yielding, in the sense of augmenting sooner the supply of consumer goods available either for home-consumption or for export. Some conservatives even

went so far as to throw doubt on the whole policy of industrialisation.

What the theory amounts to, at a more sophisticated level, is a marriage of the Theory of Marginal Productivity (at least of a particular corollary of it) with the Theory of Comparative Cost, which since the time of the classical economists of the early nineteenth century has been used to explain (and to justify) the pattern of international trade. According to the former, the price of factors of production that are relatively scarce will tend to be high and the price of those that are relatively plentiful will tend to be low. In this case it is labour that is the plentiful factor and capital the scarce. Hence by concentrating on methods of production and on industries which are relatively labour-*using* (or 'labour-intensive'), a country will be concentrating on those methods of production and industries which show the *least cost*. And this, as the Theory of Comparative Cost has always maintained, is the most economical way of using a country's resources—*i.e.* using them to the greatest effect. Much better do this, and export part of the products of such industries, importing such things as machinery in exchange, than use labour and capital 'uneconomically' in producing the latter at home.

On this basis there was constructed what amounted to a theory of stages of development. First of all a country concentrates on fairly primitive, so-called labour-intensive techniques and on industries which from their nature require relatively little capital and have a low capital-labour and capital-output ratio. In the course of time, as capital accumulates and surplus labour gets drawn into employment, it can graduate towards more advanced techniques and develop the more 'capital-intensive' type of industry. Eventually, as it joins the ranks of mature, developed countries, it can shift towards the production of

capital goods, and import its foodstuffs and raw materials and even a lot of its industrial consumers' goods from countries at a lower stage of development. This, as we have seen, was the traditional order of development of capitalist countries.

The emphasis of this for the underdeveloped was on primitiveness and gradualism: on following the traditional pattern of nineteenth-century capitalism and avoiding grandiose schemes of technocrats and planners.

Is there a flaw in this reasoning, and if so where exactly is it to be found? The short answer is to say once more that this reasoning depends essentially on taking a static point of view, from which some crucial factors in growth are excluded. When we take account of the latter, the conclusion emerges that the course of action which makes employment and output as large as possible here and now, in the conditions of the moment, is not necessarily the course of action that will maximise the *growth-potential* of the economy —quite the contrary. A policy of maximising the latter, even if it is at the expense of making immediate output and employment smaller than they would be under an alternative policy, will enable both output and employment (and hence consumption) to grow more quickly, and before long to be larger than they would otherwise have been at such an early date. The point is that a smaller share of a total that is growing fast can very soon become larger than a bigger share of a total that is growing more slowly.

This conclusion evidently depends on what determines the growth-potential of an economy. What, then, is this growth-potential? One should explain, perhaps, that one is not speaking here of *financial* limits on the amount that can be invested, but of real or production limits—real resources available and production-possibilities of the requisite kind.

These limits may be of various kinds. Yet in a particular

situation there is likely to be one (or a few) that is more important than the rest, because it is in these circumstances more restricting. If the resources available can be directed towards widening this 'bottleneck', they will evidently be contributing very much more to promote growth than if they are used in any other way. It is in this sense that achievement in promoting growth may depend more on the way you use the investible surplus than on its initial size.

If we revert to what was said earlier about Soviet experience, it will be remembered that there were two crucial bottlenecks confronting development on the eve of the First Five Year Plan. Firstly, there was the marketed surplus of agriculture: *i.e.* the amount of foodstuffs and raw materials over and above the consumption of the peasant producers (with their families) that was placed on the market outside the village, and hence was available to feed a growing urban population of workers in industry and construction. Secondly, as soon as the rate of construction was stepped-up, there proved to be a bottleneck of constructional and building materials, in particular iron and steel and fuel and power. Obviously, new factories, steel mills, power plants and industrial towns cannot be built faster than cement and steel and bricks become available for their construction and fuel and power are available to drive the new machinery when it is installed. It seems likely that both of these limiting factors will be operative at some stage in most developing countries; the former probably being dominant at the early stage of growth and the latter becoming dominant as industrialisation gets into its stride. They will operate, that is, as effective limits upon the rate at which a country can develop out of its own resources.

What conclusions can be drawn from this for actual policy? In particular, what implication does it have for the precepts of traditional theory? Expressed in general terms,

the implication is that whatever investment-potential one has should be concentrated upon methods and lines of production which will increase this investment potential still further. In so far as the limiting factor consists in the output-capacity of the industries which produce capital goods (machines and constructional materials), the possible growth-rate in the future will be higher the larger the proportion of current investment that is directed towards expanding this sector of industry (Marx's Department I industries). This for the simple reason that one will have a larger output of steel and machines in future years with which to construct and equip new factories and power-plants and steel-mills. To this extent machine-tools to make more machine-tools will be more growth-inducing than automatic looms or shoe-toe-lasters.

In so far as the limiting factor consists in the available surplus of foodstuffs and other consumer goods, over and above what is consumed of them by their own producers, it will *not* be the best policy (from a growth-standpoint) to invest in very low-productivity 'labour intensive' techniques, even if at the moment these would be capable of affording a larger volume of employment. On the contrary, techniques should be chosen which, even if more costly, are more productive, and which by achieving a higher level of productivity per worker will make the surplus product larger; thereby enabling a larger labour force to be employed in other sectors of the economy.[1]

[1] This argument for more 'capital intensive' techniques, as we shall see, applies only up to a certain point.

In this connection some readers may recall a remark made by Stalin—one that I see no reason to question—that "surplus product as the sole source of accumulation . . . accumulation as the sole source of reproduction . . . all these tenets of the Marxian theory of reproduction . . . are tenets which hold good not only for the capitalist formation, and which no socialist society can dispense with in the planning of its national economy." (*Economic Problems of Socialism in the U.S.S.R.*, Moscow 1952, p. 89.)

It follows from this that one cannot speak of a given investment total, or rate of investment, *independently of how it is used*; since the way it is used will inevitably influence the size of this total in the future. Hence it is a fallacy to start an argument by assuming a certain investment-ratio, and then discuss its most desirable allocation as though the two were in no way connected.

A high growth-rate policy of this kind will involve, it is true, a conflict in the very near future between the requirements of growth and a quick expansion of employment and consumption. If one fixes one's eyes on a year or two ahead, one will tend to be obsessed by the latter and to opt for policies which achieve this end. But if one raises one's eyes to look a little further ahead, the conflict vanishes, since the high growth-rate policy will soon make possible a more rapid expansion not only of investment but of employment and consumption as well. This it will do by causing a larger proportion of the employed labour force to be used on construction and other growth-inducing activities. Nor may one have to look very far ahead to see this conflict disappear —much less far than has been commonly imagined; and this by reason of those powerful self-expansionary forces in growth as soon as the growth-rate has been raised above a low level, to which attention was drawn in the last chapter.

A Soviet writer on investment problems, Professor A. I. Notkin, has illustrated what is substantially the same point with the following example. Using an initial investment-ratio of 20 per cent (ratio of net investment to national income) and a capital-output ratio of 2·5 (which he calls "the coefficient of investment needed to increase national income by one per cent"), he shows that if the investment-ratio is stepped-up one per cent each year, the level of *consumption per head of population* (itself assumed to be growing by 3 million annually, or about 1·5 per cent) will be *higher* after

the seventh year than if the investment-ratio had either been held constant or had been reduced one per cent each year. On the opposite page will be found the gist of his example, giving all three cases, or variants (constant, rising and falling investment).[1] For brevity we give only the first two years and the last two in each case.

It can be seen that the rise in consumption per head between Year 7 and Year 8 is greatest in Case 2, when it is ·30, compared with ·25 in Case 1 and ·18 in Case 3. But between Year 1 and Year 2 it is greatest in Case 3.

There are fairly obvious reasons why a capitalist economy is most unlikely to maintain a high growth-rate policy of the kind we have outlined, whereas socialist planning can achieve it. These can be summed up by saying that individual business men in their investment policy are incapable of looking very far ahead; and this not because of any innate shortsightedness but because of the situation in which each decision-maker is set in an unplanned, free-for-all individualist system. He cannot look far ahead because the horizon is limited for him both in time and space—limited by the haze of uncertainties involved.

In the first place, he can only afford (from a profit-making standpoint) to take account of the consequences of his action which accrue to his own firm. Such effects as it may have for other firms and other industries and for society as a whole are not his business (except so far as he thinks, perhaps, that

[1] *Problemi Politicheskoi Ekonomii Sotsializma* (Problems of the Political Economy of Socialism), ed. Y. A. Kronrod (Moscow, 1960), pp. 177–8. In this example, it seems, the time-lag between investment and its results (in larger output) is ignored. This makes the period during which consumption is lower in Case 2 unduly short; and if a more realistic assumption were introduced about the investment time-lag the period in question would come out at *longer* than 7 to 8 years. Regarding the arithmetic of Cases 2 and 3, it should be noted that the Investment Fund assumed to be operating *between* the 1st and 2nd Year is *not* 120, but in the one case 126 ($=600\times\frac{21}{100}$) and in the other case 114 ($=600\times\frac{19}{100}$); and analogously for each subsequent year.

1st Case	*Investment Percentage*	*National Income (md. roubles)*	*Investment Fund (md. roubles)*	*Consumption Fund (md. roubles)*	*Population (millions)*	*Consumption per head (th. roubles)*
1st Year	20	600	120	480	180	2·66
2nd Year	20	648	129·6	518·4	183	2·83
.....	.....	.....	.....	.....	.....	.....
7th Year	20	951	190·2	760·8	198	3·84
8th Year	20	1027	205·4	821·7	201	4·09

2nd Case	*Investment Percentage*	*National Income (md. roubles)*	*Investment Fund (md. roubles)*	*Consumption Fund (md. roubles)*	*Population (millions)*	*Consumption per head (th. roubles)*
1st Year	20	600	120	480	180	2·66
2nd Year	21	650·4	136·6	513·8	183	2·81
.....	.....	.....	.....	.....	.....	.....
7th Year	26	1028·5	267·4	761·1	198	3·84
8th Year	27	1139·6	307·7	831·9	201	4·14

3rd Case	*Investment Percentage*	*National Income (md. roubles)*	*Investment Fund (md. roubles)*	*Consumption Fund (md. roubles)*	*Population (millions)*	*Consumption per head (th. roubles)*
1st Year	20	600	120	480	180	2·66
2nd Year	19	645·6	122·7	522·9	183	2·86
.....	.....	.....	.....	.....	.....	.....
7th Year	14	880·4	123·3	757·1	198	3·83
8th Year	13	926·2	120·4	805·8	201	4·01

they may affect the price- or sales-policy of his immediate rivals). He will be in ignorance as to what other firms and industries are planning to do by way of expansion: at best he can make rather vague guesses, and the vaguer these are the more he will play for certainty and wait and see. Yet development essentially consists of a complex of inter-dependent actions, each influencing and being influenced by the rest. If an individual capitalist invests in expansion, it will be (if he is wise) for an immediately foreseeable market, and on the basis of productive possibilities (in the way of supplies of raw material, components, equipment and transport facilities) that are already visible.

Hence capitalist investment and expansion, with rare exceptions, will tend to *follow market-demand* and not lead it —and market-demand will itself depend largely on investment-decisions taken in other parts of the economy. This explains why the 'natural' development-pattern for capitalism has been the way of so-called 'textiles first'. The last thing that a private enterprise, free market economy is likely to do is to invest in the development of additional productive capacity for making machine-tools *in advance* of any immediate or easily foreseeable demand for them from other industries. To do so would be an act of faith that gambled on the maintenance of a particular rate of investment in the economy at large for a decade or two. When this kind of development has occurred it has either been under the stimulus of war-demand or rearmament or a burst of railway building, or else in the heady optimism of boom years which has very soon collapsed into a slump. It is true, as we saw in the first chapter, that at certain stages of their development the more developed capitalist countries have expanded their capital goods industries more rapidly than industries making consumers' goods. But this was at a relatively late stage, after the consumers' goods industries,

with their demand for machines for replacement and expansion, had shot ahead and an export market for capital goods had developed from the industrialising needs of other countries still at an earlier stage of growth.

To avoid misunderstanding, it is perhaps fitting at this stage to introduce certain qualifications. It would obviously be a caricature of what has been said to represent it as a policy of putting one hundred per cent of what is invested (or anything approaching that figure) into expanding the capital goods sector. If employment is to be expanded at all, there *must* be an expansion of consumer goods production in order to cater for the needs of the larger army of workers. Part of the surplus product will always need to go towards social rather than strictly economic needs, in the form of housing for additional workers, health facilities, improved education, etc. This will always set a ceiling on the growth achievable. Moreover, provision will need to be made especially under socialism for a *rising* wage-level over time, not a stationary one. What may prove necessary, however, in the early years, while investment-priority is being given to capital goods industries in order to achieve a higher growth-rate, is that for a period the output of consumers' goods should increase *more slowly* than total employment. This will involve some measure of what has been called 'redistribution of consumption within the working class', as between those previously employed and the newly employed —a process not without its difficulties and tensions. This is not inconsistent, however, with total consumption rising at the same time and also average consumption per head of the population. Something of this kind probably occurred in the U.S.S.R. and other socialist countries in the initial period of their industrialisation drive.

Again, it would be an absurd exaggeration of such a policy to suggest that the most advanced techniques which

scientists and engineers can devise should always be adopted, irrespective of the cost. To do so would not maximise surplus product but reduce it; since so few machines of this highly expensive type could be made with the investible resources available that their higher productivity would be more than offset by the fewness of them. It would be the opposite extreme of absurdity from adopting spade-husbandry because so many could be employed thereby. More costly 'capital-intensive' techniques should be adopted up to the point where the higher labour productivity balances (so far as its effect on surplus product is concerned) the higher cost in labour of making the necessary machines, but no further than this. What is involved is the distribution of labour between making machines and operating them in such proportions as to yield the maximum effect (from the standpoint of growth).

Again, it does not follow from what has been said that investment and its distribution and proper choice of technique are the only factors affecting growth. To have concentrated attention on certain leading economic influences is not to deny that there are important political and social factors as well which will affect the result. One of these is the question of ownership and motivation, and the type of social organisation, especially in agriculture. We noticed the crucial importance of the latter when we spoke of collectivisation in the Soviet case. There is also the question of the human factor and its motivation and of raising the level of human skills by the spread of education generally and in particular the specialised training of skilled industrial labour and technicians. These are not things which can be easily expressed in a quantitative form. Here important qualitative changes are involved which may make a major difference to the outcome. Moreover, technical knowledge is continually changing, and with it the technical possibilities

available; and the capacity to absorb and adapt new technical knowledge to the requirements of production, overcoming technical conservatism, may be equally important, especially in fairly developed countries, as choosing the right techniques from among a range of existing and known possibilities.

Finally, a word must be said about foreign trade. Because we have been concerned in this chapter with the possibilities for a country of building up its productive powers from its own resources, this must not be taken to imply an advocacy of self-sufficiency and a denial of the advantages of international division of labour. What we have said is (a) that the possibilities for most underdeveloped countries to provide the means of development by expanding their exports are probably much narrower than is commonly imagined, (b) that the doctrine of Comparative Cost should not be statically interpreted so as to freeze the old nineteenth-century pattern of international division of labour upon the world (cf. on this latter point Paul Baran, *Political Economy of Growth*, pp. 292 seq.).

Even if they cannot place main reliance upon it, such countries will meet some of their development needs through foreign trade—and inevitably so in the early years if they have no heavy industry of their own. To this end part of the surplus production of agriculture and of light industry will have to be earmarked for export, before capital goods can be acquired for the expansion of industry. But what was said above about maximising social product as the way of raising the rate of growth will remain unaffected. The smaller a country is and the more limited its natural resources, the more reliant will it be on meeting its needs by export, and the more conditioned will its development be by the possibilities of meeting the needs of growth in this way. What we have said about the importance for growth of

developing a capital goods industry must not be taken as applying to every country however small or little-endowed with natural resources. So-called 'economies of scale' and the productive advantages of specialisation impose a lower limit on the size of a market for which it is worthwhile for an industry to cater, and correspondingly an upper limit on the number of branches of industry that it is practicable for a small country or region to have (unless it has very large export possibilities). The argument about investment-priority for heavy industry is best thought of as applying to fairly large countries—and to those as large as India, China or U.S.S.R. without any qualification; or else to a *group* of smaller countries, say in Africa or Asia, co-operating together in their trade and in their development plans, as the socialist countries of Eastern Europe are now doing.

It will have been noted that the basic question we have been discussing is the extent to which (and the means by which) countries can develop economically out of their own resources. We have ignored the question of so-called 'foreign aid' and how the possibility of this affects the situation. This we have done advisedly, in the belief that the question as here posed corresponds essentially to the real problem confronting underdeveloped countries. It is quite widely recognised in these countries (and not only among socialists) that there is little chance of attracting foreign capital or aid from America or American-controlled institutions (or for that matter from Britain or West Germany) without strings attached—and on any extensive scale without becoming closely harnessed to cold-war strategies (as has happened already with a number of countries which have virtually become American outposts and bases). To keep reliance on foreign aid to a minimum has accordingly become an axiom of genuine political inde-

pendence. Economic aid from U.S.S.R. and China (in the form of long-term credits) has made a significant contribution in particular cases (especially within the socialist camp, where it has amounted to some 8 milliard roubles since the war); but is unlikely over the next decade, at least, on a world scale to meet more than a marginal proportion of the investment-needs of underdeveloped countries. It has to be remembered that both U.S.S.R. and China, as well as other socialist countries, have large and ambitious development programmes of their own. If there should be international agreement on universal disarmament, and a liquidation of the cold war, the position might be different, as is so cogently argued in Prof. Bernal's *World Without War*. Then a much larger slice of resources could be released for the benefit of the poor and the underdeveloped; to this extent their economic growth would become easier, and some of the things written above might have to be suitably modified. Even then, however, it would remain true, I believe, that underdeveloped countries would need to shoulder the major part of their development themselves, by mobilising their own resources and potentialities.

6

CONCLUSION

How far (it may be asked) will the things we have been talking about apply to already developed industrial countries as well as to the underdeveloped? Evidently they will apply most fully to the underdeveloped, and it is with these and their problems that we have been mainly concerned. It might seem that mature countries like those of Western Europe and America have already a developed potentiality for growth, and that what they now need is less an increase in production than a better distribution, the abolition of classes through ending enrichment by property-holding and acquisition of monopoly-power, the removal of distortions introduced into the economic system by monopoly-capitalism and the harnessing of existent productive powers to socially beneficial ends. Some would say that, not more production, but a different scale of values is what is needed. There has been much talk in recent years, especially in relation to the American economy, about "private affluence and public squalor": the proliferation of new products and gadgets by private industry and the stimulation of a spurious demand for them as 'status symbols' by sales pressure and advertising propaganda, while public services are starved and the creation of new social standards and superior patterns of living is ignored. The cult of individualist money-making, it has been said, with its reduction of social values to a dollar standard, is a degradation of human

beings. Some may recall that it was a well-known economist of liberal persuasion who spoke of love of possession of money as "disgusting morbidity, one of those semi-criminal, semi-pathological propensities which one hands over with a shudder to the specialist in mental disease" (Keynes, *op. cit.*, p. 369). The prime task, according to some, is to eradicate this and not to continue worship of mere material increase.

Developed and underdeveloped, however, are relative terms; and it can scarcely be denied that plenty of leeway remains to be made up and that there is scope for further development of productive powers even in the industrialised countries of Western Europe and America. Poverty still stalks the alley-ways and shacks of the North American continent as well as the cities of Europe. We have seen that, despite the industrial progress of the past thirty years (which has taken her well out of the category of 'underdeveloped'), the Soviet Union is planning for a high rate of growth over the next two decades in order to "lay the basis for the transition to communism". She does not intend to rest on her oars until at least the main human needs are satisfied in sufficient abundance to permit the principle of distribution "to each according to his need".

Yet there is a crucial difference, it is true, between the economic problem in fully industrialised countries and in the bulk of the unindustrialised. The latter are apt to be characterised by surplus labour existing in a hinterland of overpopulated agriculture, whereas in developed industrial countries surplus labour if it exists is of much smaller extent and constitutes no such enduring reservoir. For underdeveloped countries, as we have seen, the existence of surplus labour, while it presents a problem, affords also an opportunity for development if only the means can be found for harnessing this labour reserve to productive employment.

In already industrialised countries the accent will have to be laid even more upon raising labour-productivity (*i.e.* the productivity of the existing labour force) by technical change and technical improvement. For them the capacity to extend and to utilise technical knowledge acquires predominant importance; and since they already possess a large capital goods sector as well as a skilled working class, they are in a much better position, potentially at least, for taking advantage of technical possibilities and for maintaining a high rate of growth.

Yet it is precisely in old and developed capitalist countries like Britain and U.S.A. that growth is slow and even shows signs of stagnating. This very fact indicates, I believe, that economic growth remains a concern of the peoples of these countries as well as of unindustrialised nations. In neither of these countries has the rate of net investment in recent years been above 10 per cent. It might seem strange indeed that economic stagnation should haunt both extremes in the hierarchy of growth—the mature and the underdeveloped.

One rather obvious reason for this stagnation is that so much of the resources of these countries which might otherwise be used to promote growth is swallowed up in military expenditures at home and abroad. At the same time, however, it is the size of these military expenditures that is commonly cited as a leading influence in keeping these mature capitalist economies at a boom level of activity for so long. Clearly there must be other depressing influences at work. Evidence suggests that the main depressing influence here is the mounting degree of industrial excess capacity, the existence of which discourages investment and innovation—creating a defeatist mood of 'fear of productive capacity', lest its extension reduce the value of capital sunk in existing capacity.

Thus a recent American study suggests that productive capacity in American manufacturing industry has more than doubled since 1943 (the war-time peak) against an output increase of little more than a fifth; so that nearly a half of existing productive capacity, it is said, is unutilised (*Monthly Review*, New York, June 1962, pp. 88–92). Such excess capacity, indeed, coexists in U.S.A. with a substantial margin of unemployment—a margin which shows every sign of becoming chronic, and of increasing rather than diminishing. It is an odd reflection upon the devotion of American academics to "the American way of life" that in successive editions of a post-war best-seller economics textbook the figure of so-called "permitted unemployment" has been revised upwards. It is also a mordant comment on the mechanism of capitalist economy that growth-rates are lowest where excess capacity is most in evidence.

As Professor Paul Baran has said: "In the advanced countries the discrepancy between what could be accomplished with the forces of production at the disposal of society and what is in fact being attained . . . is incomparably larger than in the backward areas" (*Political Economy of Growth*, New York, 1957, p. 249).

In *lieu* of a summing-up, one could perhaps express the contrast which the problem of growth in the two parts of the world presents, in this way. In mature industrial economies like U.S.A. and Britain growth is slow because capitalism, in its latter-day monopolistic form, is incapable of harnessing the latent potentialities for growth that exist (and which in the past, over a century or more of development, capitalism itself created). In the underdeveloped, for the reasons we have examined in earlier chapters of this booklet, indigenous capitalism is incapable of creating these potentialities unaided; and such countries remain a stagnant

prey to the 'vicious circles' of backwardness and poverty. In both cases socialist planning is coming to be seen in the world today as the only effective answer to the economic problem: in the one case the problem of creating and building the potentialities of growth and in the other case of utilising them fully and extending them where they exist until the economic problem is conjured out of existence. We have already cited Lord Keynes as a non-socialist witness more than once; and we may as well quote him once again. Writing some thirty years ago, he spoke of the probability that "the economic problem may be solved . . . within a hundred years" (given no wars and no large population increase). By this he meant that what he called "absolute needs" would be fully satisfied. Socialism holds out this possibility at an earlier date than a liberal economist could even contemplate; and the Soviet Union, as we have seen, looks upon it as a matter of two or three decades —half a century earlier and starting from a lower level.

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