

"CAUSES OF UNDERDEVELOPMENT"

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Definition

Before discussing the causes of underdevelopment it may be useful to say what the term 'underdevelopment' means in this paper. By 'underdevelopment' I mean that the resources available are not as utilized as the general level of technology would permit them to be. Though the economic unit we are concerned with is the 'country' we cannot limit ourselves to either the natural resources or the level of technology that exists in any given country.

The diffusion of technical knowledge or the potential diffusion of technical knowledge and its availability makes it an international resources. It may not be available in all countries alike but it could be made available as one of the integral parts of development is the making of technical advances available for the utilization of resources.

Natural resources dealt in most writing of economic growth are those that are available within the country i.e. the factor endowment of a country. In the development of a country what is important is not its factor endowment but what can be available. No development of a country, particularly that of Great Britain and Japan can be explained in terms of the natural resources available in that country. However we need to go further, and that is with the development of transportation very considerable part of the raw materials be necessary for production can be brought into the country. The limits placed on economic growth by factor endowment or natural resources are not as restrictive as they may have been in the past.¹

Since the end of the World War II there have been momentous scientific advances and the consequences of these advances may have even greater effect on factor endowments of countries than advances in the means of transportation or the development of fuel power engines. But that is matter for the future.

I do not want to give the impression that I think that natural resources have ceased to have any limiting effect on economic growth. What I want to impress is that the nature and supply of natural resources within a country is not as great an impediment as it used to be or often made out to be. We are in a position to augment without much difficulty a country's endowment within considerable range by international trade. I therefore do not intend to discuss the underdevelopment that may arise as a result of scanty factor endowment.

Most discussions on the underdevelopment fall into the following group:

- (1) Over population
- (2) Shortage of Capital
- (3) Shortage of Investment opportunities
- (4) Lack of skills
- (5) Scarcity of Entrepreneurs

Over population

There are 2 main aspects to the over population argument:-

(1) Over population (the scarcity of resources in relation to the number of people that have to utilise them with the technical knowledge they have) is advanced as an explanation for retarded economic growth in the past.

Is this an adequate or valid explanation why economies of many countries did not develop in the late 19th Century? Some economists have denied this.² Whatever historical evidence there is, seems to show that very few of the countries that are at present underdeveloped were overpopulated at the time they were 'opened up' to international trade. In some countries there was such acute underpopulation that for the development of plantations and for opening up the country it was necessary to import labour and encourage immigration, Malaya, Ceylon and West Indies.

1. Sir Denis Robertson: The Future of International Trade (Economic Journal)
A. Bonne: Towards a Theory of Implanted Development in Underdeveloped Countries
Kyklos Vol. IX 1956.

Decline in death rate and the consequent jump in the natural increase of the populations of many of the underdeveloped countries took place mainly in 20th Century. In the fifty years prior to 1921, India never had 2 decades of substantial population growth in a row.³

In Japan on the other hand there was overpopulation. But that did not prevent her from getting developed. In 1850 "Japan was in a position comparable in some respects to that of Haiti at present. The density of population appears to have been somewhere in the range of 500 to 1000 per square mile of arable land with very narrowly limited opportunities of expanding the area under cultivation."⁴

We have the case of India where there had been no economic development in the 19th Century, though evidence seems to show that over population was improbable. We have the case of Ceylon, Malaya and West Indies, where labour had to be imported and yet today they are underdeveloped countries. Then we have the instance of Japan where there is evidence of overpopulation and yet economic development took place. In view of these instances it is difficult to maintain that overpopulation was the cause for the lack of development in the past.

(2) Rapid growth in the population retards economic growth by increasing the consumption and thus reducing savings.

This argument is not as obvious a truth as it appears to be. The first question is whether it is in fact true that a rapid increase in the population does in fact reduce savings. Serious doubts arise when we go beyond national aggregate concepts and look at the alternatives that may exist for a breadwinner with a large family.

The share of his produce that he may pay in taxes, to landlords or to merchants who buy his produce is unaffected by any increase in his family size. The amount at his disposal for consumption and savings would remain unchanged. Therefore in the first instance the fund from which most of the savings are likely to arise, i.e. incomes through rent, taxes and profits remain unchanged. The part of the rapidly increasing population whose consumption has to be met from the profit-rent fund is unlikely to be large even if their families are larger (as they are likely to be with better survival ratio) than those of peasants. Increased consumption pressure on the rent-profit fund is unlikely to be significant.

What about the peasant or worker? Whether there would or could be any shift from savings to consumption would depend on whether he has money savings and/or he would shift his labour from whatever capital forming activity he may have on building of bunds, thatching his house, making improvements to his field etc. It appears to me that money saving of peasants would be very small if any, in most underdeveloped countries. Therefore he has little or no opportunity to enlarge his consumption by reducing his saving. The kind of capital formation that he has is not of the kind that can be used either for consumption or capital.⁵ Further they are so important to his earning power that he is unlikely to transfer the time he spends on doing them in order to purchase additional consumption goods. It is most unlikely that his labour capacity is so fully used that his efforts to increase consumption has to be at the expense of the labour he expands on capital improvements. Therefore instead of increasing consumption, a rapid increase in population would be largely met by a redistribution of the fund available for consumption, i.e. less food in more mouths.

2. G.M. Meier: Problems of Limited Economic Developments in A.N. Agarwala and S.P. Singh (Ed) Economics of Underdevelopment Oxford University Press Bombay 1960 pg. 56-7.
H. Myint: An Interpretation of Underdevelopment. A.N. Agarwala and S.P. Singh op.cit Pg. 103.
3. K. Davis: Social and Demographical Aspects of Economic Development of India in S. Kuznets: et al, Economic Growth of Brazil, India & Japan. Duke University Press, Durham N.C. 1955. Pg. 276.
4. I.B. Treuber: Population & Labour Force in the Industrialization of Japan. in Kuznets. op. cit pg. 320.
5. Gayl Ness: Population Growth, Economic Development & Development Policies Journal of Tropical Geography Vol. XVII

It has also been suggested by Ness that as most peasants in under-developed countries are below the production - possibility curve (transformation curve) the pressure on consumption by increasing population may lead to an increase in output. Here the question is whether the peasant is below the production - possibility curve where the curve is related to his resources and technical knowhow, I cannot imagine additional mouths being a greater pressure on him to move up toward this possible output, than say, the meagre consumption of existing mouths or continuous decrease in consumption due to indebtedness.

The increase in the family size may probably worsen an individual's position but a rapid increase in population is unlikely to cause any significant reduction in saving. It reduces the capacity for saving when there is a rise in incomes, as the desire to raise consumption may be very strong.

The lowering of consumption levels by a section of the population which has low levels of consumption must inevitably lead to a lowering of the quality of human capital. In 1954-5 the average calorie intake of a person in India was 1840 calories per day or less than 2/3rds. that of a person in France which was the lowest in Western Europe, North America, Australia and New Zealand and the protein intake 50 grams which was slightly more than half that per person in France.⁷

In a developing economy a rapidly increasing population also puts some pressure on social investment, particularly where there are representative governments, leading to a diversion of some capital to social services which may otherwise be available for other forms of investment. It is true that this is investment in social capital but it may not be possible to utilise the results of the social investment because there is often more persons than there are productive opportunities.

It is difficult to say how great a brake this diversion of capital into unutilized social investment would be on economic development. It seems that it is unlikely to have the significance attached to it by advocates of the over-population theory.

Despite the doubts we have about some of the claims of the over population theory, it is not possible to treat it as completely irrelevant to the problems of development. A large population increases the magnitude of the task of development. Very large capital investments would be required for increasing the productivity of the population. Much of the early gains of development may be absorbed by consumption. The pressure on land resources will not be eased even if there is considerable industrial development.

Japan's rapid industrialisation of the early 20th Century did not reduce the number of people engaged in agriculture significantly⁸ and this tended to reduce the per capita growth in income. That is, given rapid population growth, industrialization for some time may only be able to absorb the increase in population and thus prevent the increase in the pressure on land but not reduce the existing pressure.

It is probably needless to say that a large population with a rapid rate of growth would make the task of industrialisation all the greater.

A rapid growth of population in underdeveloped countries is something that we have to learn to live with. The checks to natural increase in the form of disease and natural disasters have been in many cases largely removed by the progress of science. The decline in death rates have not been followed by parallel declines in birth rate.

6. Per capita output of food crops in the period 1893 to 1946 fell by 32% and all crops by 20%. D.Thorner. Long-term Trends in Output in India in S.Kuznets. op cit. Table IV.3
7. G.M.Moier & R.E. Baldwin: Economic Development Theory, History & Policy John Wiley and Son: New York 1957, Table 14:1
8. W.W. Lockwood: The Scale of Economic Growth in Japan. S. Kuznets. op. cit. pp. 143-4.

There is thus going to be an inescapable growth in the rate of natural increase for some time. If economic development is to wait for the decline in the birth rate we may have to wait a very long time. The experience of eastern countries and Japan show that only with large scale urbanisation that results from industrialisation would there be an adjustment in the birth rate.

Probably the first effects of urbanisation would be more effective health facilities and further decline in the death rate without immediate decline in the birth rate. Consequently with industrialization the chances are that there would be further jump in the rate of natural increase.

We have seen that in the case of Japan, its over population did not prevent the break through to industrial development nor did the quickening of population increase with industrial development stifle it. It may not be possible to repeat the Japanese experience in other under developed countries, and if possible may not be desirable. But it is evident that the thesis that overpopulation prevents the takeoff into economic growth may not have the validity that is often claimed.

It may be more effective to industrialise in order to control population growth than to control population growth in order to industrialise.

Shortage of Capital

(a) Domestic

It is axiomatic that investment is necessary for economic growth. W.A. Lewis considers this the central problem of economic development theory, "The central problem of the theory of economic development is to understand the process by which a community which was previously saving and investing 4 or 5% of its national income or less converts itself into an economy where voluntary saving is running at about 12 to 15% of national income or more."⁹

Nurkse¹⁰ has drawn our attention to the possibility that the problem of capital in underdeveloped countries is not limited to supply but there is also the question of demand for capital. One tends to assume that because all underdeveloped countries are in need of capital for development there could be no problem of demand for capital i.e. there would be no lack of persons or organizations prepared to utilize the capital that is available.

Both the supply side of capital (savings) and the demand for capital are afflicted by what Nurkse calls the 'vicious circle of Poverty'.

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

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

"The low level of real income, reflecting low productivity, is a point that is common to both circles."¹¹

Therefore the central problem of economic development, of making savings 12% or more, may in the final analysis be very much a question of increasing incomes so that there can be increased saving. That is, creating the capacity to save may be more important than creating the machinery to save.

9. W.A. Lewis: Economic Development with Limited Supply of Labour. in A.N. Agarwala & S.P. Singh. op. cit pg. 416.
10. R. Nurkse: Problems of Capital Formation in underdeveloped Countries Blackwell Oxford. 4th. Ed. 1955. Chap. I.
11. R. Nurkse op. cit pg. 5.

It may very well be that in many of the industrially developed countries the growth process was partly initiated by a change in the rate of savings. Or more correctly profit from trade increased real income and thus created a capacity for increased saving which in association with technological changes in an interactive and cumulative process initiated and accelerated growth.

There may in such instances, be a justifiable emphasis on the attitude to saving and the machinery for encouraging and mobilizing saving. But even here we are not too far away from the capacity to save and the changes that took place in this capacity. The supply of domestic capital in the first instance is related to the community's capacity to save and not to interest rates, institutions of saving or even attitude to saving. Only where increased saving is possible and not undertaken, do questions of inducement arise. From the vast majority of the people of underdeveloped countries living at subsistence levels, there can be little response if any to inducements to save. On the other hand there are countries in the pre-industrial stage of growth, like India in the first half of 20th Century, where though the percapita income is low, income distribution may be such that increased savings are possible among a small section of the population. Wealthy landowners and those merchants who have acquired the social habits of the landowners probably indulge in wasteful conspicuous consumption. From these groups exist greater domestic save is possible

Many of the proposals to mobilise domestic capital seem to assume that there is the capacity to save and what is lacking is the institutional framework to encourage saving.¹² This may be an exaggerated estimate of the capacity to save of the people of underdeveloped countries. On the other hand I may be underestimating the capacity to save, particularly if one takes into account the fact that Japan financed from domestic sources the first phase of her economic development.

Supply of domestic capital in underdeveloped countries would probably result from changes in the consumption habits of persons who have the capacity to save and also (after a time lag) from new income generating growth creating new capacity to save.

Increase in the total supply of capital does not mean that capital would flow into the industrial sector unless adequate measures are taken to make it go into the industrial sector. Economists have for long assumed that capital has some natural mobility and it is homogeneous. They have talked about "obstacles to capital mobility", "liquidity of capital" "flow of capital." Much of the interest rate theory and theory of profit is built on the implicit assumption that capital like water would find its level, filling in the deeper depressions of high profit and then lesser profits until the available supply has spread itself out and establish an even level. In the process level profits and interests. Reality is probably quite different from formal models.

Experience in underdeveloped countries has been that capital does not in fact spread out like water under the magic of profit expectations. The implied homogeneity of capital is a result of equating it with money tokens. Capital which is utilized to purchase land, labour or fixed resources tends to be heterogeneous. That is, capital has little inter-industry mobility. In the first instance it moves only within the industry where it is accumulated. It would move in that industry spatially. Rubber capital would tend to move rubber industries in other parts of the world or into allied industries. Capital accumulated in the tin industry of Cornwall come to seek tin in Malaysia, Nigeria or Congo.¹³

12. United Nations: Domestic Financing of Economic Development. New York, 1950

13. J.J. Puthuchery: Ownership & Control in the Malayan Economy. Eastern Universities Press. Singapore. 1960 Pg. 155-8.

Movement of capital from the industry where it was accumulated to industries which are not allied to it is a difficult process. In the industrialized countries movement of capital from industries in which they originate to manufacturing industries has to be much more rapid. What is required is not only an increase in saving but also a change in the way the saving is utilized. There must be not only a quantitative changes but also qualitative changes. Instead however capital tends to go into those industries that already exist leading to the paradox of area investment in chronically capital short economies.

(b) Foreign

Foreign private capital as a source of financing industrial development does appear to hold out great hopes. The net inflow of private capital into India between 1949-59 was Rs. 360 million.

"Even this is likely to be an over-estimate of the net inflow, since transfers of accumulated profits during the years 1948-53 were treated by the Reserve Bank as remittances of investment income on current account, and are not, therefore, included in the estimate given about of 'repatriation business investments by non-residents.' In the last few years, such transfers of accumulated profits are known to have been of the order of Rs. 60 to 70 million per annum if this rate is assumed to have been maintained also during the years 1948-53 the estimated net inflow of Rs. 360 million over the period 1949-59 will be wiped out altogether."¹⁴

From Malaysia there is probably a net outflow of capital, mainly from those sectors of the economy in which there are large foreign investments - rubber, tin and trade. The amount of the outflow varies with the profit level. In the years of large profits like 1950-51 the net outflow was of the order 15 - 17.5% of the gross National Income. In other years the net outflow is of the order of 7 - 8%.¹⁵

Foreign investment in the primary industries affect the quality of the supply of domestic capital. A part of the domestic supply of capital is channelled into the plantation industry or other primary instead of manufacture through the 'demonstration effect' of foreign capital in those industry. In terms of economic development this may not be the best way to utilize domestic capital. Further in Malaysia and probably in other underdeveloped countries, a considerable part of domestic capital goes into the buying out of foreign capitalists instead of creating new 'productive' capital.

The hope that foreign private capital would help to solve some of the difficulties of underdeveloped countries may be a misplaced one. Large foreign investments still seem to go into extractive industries and into plantation agriculture. With political pressure however, large investments are being made in petroleum refining and its distribution. Where the market is large and where there is import restrictions some capital does flow into manufacturing. In India between 1948-55 Rs. 590 million were invested in manufacture. Between the years 1956-9 Rs. 352 million were invested of which Rs. 156 million were invested in "Chemicals and allied products."¹⁶

These investments in terms India's needs and in terms of the capital requirements of sustained economic growth are small. It appears to me that if foreign capital is to play a significant role in the economic development of underdeveloped countries it may have to be economic aid from government to government, aid of the type India receives to meet her balance of payment problem. This type of foreign finance is 4 or 5 times larger than gross foreign private inflow for a comparable period.

14. Limited Nations: Post-War Foreign Investments in India Economic Bullentin for Asia and the Far East Vol. XVIII. No. 1 1962 June. pg. 6.
15. J.J. Puthucheary: op cit. pg. 159.
16. United Nations. op cit. Table 3.

It seems to me that for a significant increase in domestic savings underdeveloped countries would have to initiate income generating economic growth. Part of this would be financed from existing domestic savings, part from foreign private capital but largely from intergovernmental loans.

Demand for Capital or lack of profitable investment opportunities

Nurkse¹⁷ says that the size of the market^{is} the main cause for the deficiency in demand for capital. W.A. Lewis¹⁸ dismisses the problem of deficiency in the demand for capital on the grounds that governments are overwhelmed with projects for investments in social capital. "What restrains this investment is not lack of demand, but simply the lack of saving to finance it."

But this does not answer the problem posed by Nurkse, though it is possible to argue that investments by government would increase effective demand. The extension of the market that would result from governmental investment may increase the profitability of other investments, some of which may not have been profitable previously. This extension of Lewis's argument raises the question whether this is the best way to expand the market and encourage economic growth. What priority is there for these governmental investments? Would many of these investments be fully utilized in the near future? Are there no better uses for the capital? Aren't there better and more economical ways of extending the market? Must governments use the capital on "roads, water supplies, flood control, irrigation, electric power, factories, schools, houses hospitals and on and on."¹⁹ (underlining mine) or could factories take a more important place in the scheme of governmental investment?

If we give a more important place to industrial investments in Lewis's scheme of governmental investments, we may bring Lewis's answer to the problem of deficiency in the demand for capital nearer to Nurkse's own answer of balanced growth. "The difficulty caused by the smallness of the market relates to individual investment incentives in a single line of production taken by itself. At least in principle, the difficulty vanishes in the case of a more or less synchronised application of capital to a wide range of different industries. Here is an escape from the deadlock; here the result is an overall enlargement of the market."²⁰ Though this may not have the general application that Nurkse and before him Rosenstein-Rodan thought it had, it may be applicable in cases where the economy is reaching the take-off point.

Given the need for synochronisation and the need for massive investment, it is unlikely that private enterprise would be able to initiate balanced growth in underdeveloped countries. There is a much greater chance that a growth-oriented government by itself or in conjunction with private enterprise would be to initiate it.

Lack of Skills

Even if the capital necessary for development were available and investment opportunities were not scarce, the type of labour that exists in underdeveloped economies could be an important short-run obstacle to the utilization of imported technological.

In underdeveloped countries generally there is shortage of educated personnel, not only those with higher education and specialized training but also those of moderate education. In some countries like the Federation of Malaya and Singapore the school system is relatively well developed and so the illiteracy rate is low. There are countries where the illiteracy rate is 92%.²¹

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- 17. R.Nurkse. op. cit. pg. 7
 - 18. W.A. Lewis. The Theory of Economic Growth G. Allen & Unwin London 1956 pg. 216
 - 19. W.A. Lewis. op. cit. pg. 216
 - 20. R. Nurkse: o.cit. pg. 11. For a critical analysis of this. See J. Marcus Fleming External Economies and the Doctrine of Balanced Growth A.N. Agrawal and S.P.Singh op.cit.
 - 21. G.M.Mieir and R.E.Baldwin. op.cit. Table 14-2 p. 296.

National illiteracy rates may be misleading. In the province of Kerala here^{is} very little illiteracy while the rate for India as a whole is very high.

I do not want to emphasise literacy too much because literacy by itself does not take us very far in the solution of the problem of scarcity of skills. The type of education that is more easily available in underdeveloped countries may be an impediment to the acquiring of the technical skills necessary for working in factories. For example we have the sizeable output of Arts Graduates in India who go to fill the army of unemployed white-collared labour in India.

Though the non-technician is important in the scheme of things we have in mind, particularly in providing the administrative framework so important for industrial development, the skills we are concerned with here are technical skills.

Some of these skills at least high levels of these skills can be acquired from universities and technical schools. We may be able to produce engineers, physicists and chemists without industries in which they can be trained. Some of their knowledge can be learned off from books. But below this level there is a large mass of men with varying degrees of skills without whom it is not possible to run industries. Many countries may lack an adequate supply of these types of men for the utilization of capital. We lack them because there isn't adequate industries in which they can be trained. Polytechniques and technical schools may be partial solutions. The supply of skills like many other problems in economic growth involves the chicken-or-the-egg conundrum. The supply of skilled labour depends on the existence of industries where these skills can be acquired and the existence of the industries on availability of skilled labour. This does not mean the existence of industries identical or even similar to those that demand the supply of skill. What is required is an industrial set up that will facilitate the training of skills which are similar to that required or at least skills that would facilitate acquiring the required skills without difficulty.

The lack of skills in underdeveloped countries very often mean that there has been no development or that the development that had taken place was not the type that could produce the skill necessary for industrial development.

There has been considerable development of plantation agriculture or extractive industries. Most of these countries have become 'specialized' in the production of one or two products for export. But there is "inadequate appreciation of one...fundamental fact: inspite of the striking specialization of the inanimate productive equipment and of the individuals from economically advanced groups of peoples in their roles as unskilled labourers or peasant producers. Thus the typical unskilled labour supplied by the backward peoples is an undifferentiated mass of cheap manpower which might be used in any type of plantation or in any type of extractive industry within the tropics and sometimes beyond it."²²

H. Myint goes on to say that the position of peasant producers whether engaged in traditional crops or new crops, is not different. He concludes:-

"Thus paradoxically enough, the process of 'specialization' of a backward economy for the export market seems to be most rapid and successful when it leaves the backward people in their unspecialised roles as unskilled labour and peasant producers using traditional methods of productions."²³

It is not the method of production that has prevented the growth of skill. The fact that the output of the plantations, mines and petroleum wells are entirely for export has also prevented the growth of industries where skills could have been acquired.²⁴

22. H. Myint. op.cit. pg. 119-120

23. H. Myint. op.cit. pg. 121

24. H.W. Singer: Distribution of Gain Between Investing & Borrowing Countries American Economic Review Papers; Proceedings. 1950.

The argument briefly is that the specialisation on the export of food and raw materials to industrialised countries, largely as a result of the investments by industrialised countries has removed most of the secondary and cumulative effects of investment from the countries where investment took place to the investing and importing countries. The secondary effect that we are concerned with here is the growth of skills.

The scarcity of skills can be an important bottle-neck to development. Without the skills to run the plants, to build the factories, build the roads, harbours and houses development is not possible. Capital without the masons, the carpenters, the mechanics and the technicians would be unproductive. The importance of creating an adequate educational system is recognised by most governments, but that does not solve the greater problem in the supply of skilled labour.

Entrepreneurship

The lack of entrepreneurs can be one of the causes to the lack of demand for capital. In recent years there has been increasing attention paid to the lack of entrepreneurs as the critical scarcity that prevents the development of underdeveloped countries. Though this increasing attention is the result of Schumpeter's contribution to the theory of growth, it has older roots.

It has been contended that the Schumpeterian innovator-entrepreneur is not critical to the growth of underdeveloped countries because the nature of development that would take place would be different. A very considerable part of at least the early part of development would be imitative rather than innovative. What we have or will have in underdeveloped countries is not economic growth such as we had in Western Europe where progress was dependent on invention and innovation, but Derived Growth²⁵ or Implanted Growth²⁶ where the task is to assimilate suitable achievements that have already taken place in the West. It can be argued that in underdeveloped countries though invention is not necessary, the process of assimilation and adaptation requires as much daring as that of the Schumpeterian hero, and is as innovative an act. To the people of industrial countries the action is imitative and assimilative but to persons in an underdeveloped country it is innovative. The entrepreneur in the underdeveloped country is the Schumpeterian hero made probably in a smaller mould.

For the purposes of this paper, it does not matter whether the factor that is short in underdeveloped countries fits the Schumpeterian concept of the entrepreneur or not. What matters is that the factor that has to perform some of the functions usually associated with the term 'entrepreneur' is in short supply and as long as there is shortage of this factor demand for capital for economic growth would be limited, if not absent.

There is no doubt that entrepreneurial capacity, though not necessarily entrepreneurs, are of critical importance to economic growth. There is I think also no doubt that persons who can perform entrepreneurial functions are in short supply in underdeveloped countries.

The aspect that is of interest to us in this paper is, why is there this shortage. We can start I think from the interesting analysis of this shortage, by Aubery²⁷. The argument is briefly that the shortage of entrepreneurs is not a matter that can be conveniently transferred to 'non-economic causes', and the non-economic motivations may have economic determinants²⁸

25. H.C. Wallix: Some Notes Towards A Theory of Derived Development.
A.N. Agarwala & S.P. Singh, op. cit.
26. A. Bonne'. op. cit.
27. H.G. Aubery: Investment Decisions in Underdeveloped Countries in National Bureau of Economic Research. Capital Formation Formation and Economic Growth Princeton University Press Princeton 1955.
28. H.G. Aubery: op. cit. pg. 397

The most important economic determinant appears to be the absence of a framework of experience that can aid the person or group of persons having to make the decision, do it with confidence. This experience need not and would not be in the same field as that in which the decision has to be made, but it would be in an interrelated field. The entrepreneurial shift from one field of activity to another is a limited and gradual one with a transition through allied fields linking the two. "History provides relatively few examples of such sharp breaks in contrast to the frequent, perhaps 'normal' case of novel features superimposed on familiar technology."²⁹

A very considerable part of the industrial development there is in underdeveloped countries seems to have been gradual growth in limited groups of industries. In India, the cotton industry grew on the model of the jute industry set up by foreign capital. Men who had made money in the trade of piece-goods gradually began to manufacture them. In Malaya we have instances of persons or companies that have made profits in the trade of flour, sugar and cement, joining their suppliers or others in setting-up flour mills, sugar refineries or cement factories. Of course all development does not follow this pattern of growth. We may have cement factories or steel re-rolling mills set up by large building contractor interests. There may or may not be other interests. In one case the steel re-rolling mill was built in conjunction with ship-breaking interests.

A more promising line of development is the growth joint enterprises. Foreign manufacturers seek to consolidate their markets in the face of import restrictions or possible competition by the entry of some other manufacturer. This has led to an interest in joining their local distributors or agents or setting-up factories for the manufacture of the product:

This type of development by themselves cannot explain all of the little development that has taken place in some underdeveloped countries. Visits to foreign countries, imitation of foreign type factories that have been set up by foreigners, immigration of men experienced in entrepreneurial activity have all played some part in the development that has taken place.

Even if, we take the most optimistic view of this development, there still remain the general problem of the scarcity of entrepreneurial capacity in terms of the needs of a reasonable rapid growth.

Aubery's has focussed our attention on the need for a framework of experience. Levy has suggested that the 'late comer' to economic growth, the beneficiary of 'Derived Growth' or 'Implanted Growth', is unable to go through some of the process that gave rise to framework of experience. Jointly they may help us to understand this lack of entrepreneurial capacity for industries when there seems to be no lack of it in trade, speculation and similar activity.

The limited gradual step-by-step transition from one economic activity into another and the gradual acquisition of a framework of experience necessary for the innovative, imitative or adaptive decision is not available to decision makers in underdeveloped countries. Aside from the compulsions for rapid development, there is what may be called the difficulties of the 'late comer'. What may have been advances in the techniques of production and scales of operation when countries of the West were in the early stages of growth would be outmoded and uneconomic in the present day. The late comer in a good many instances may have to start with techniques and on scales that can compete with foreign production. Otherwise his cost of production may be such that he would not be able to start at all because of the challenge of imported substitutes. "...many of the interstitial stages of development of these forms of capital would be markedly uneconomic in the sense that they would cast more than their use could add even to aggregate output."³⁰

29. N.C. Aubery: Op.cit. pg. 400.

30. M.J. Levy Jr. : Some Social Obstacles to "Capital Formation" in "Underdeveloped Areas" in National Bureau of Economic Research. op.cit. pg. 451.

The scale and technique of operation in underdeveloped countries need not be the largest and latest but it has to bear some economical relations to the scale and technique of its competitors and potential competitors.

Having to work at this advanced level, the possible entrepreneur soon runs into trouble because he is unlikely to have the information necessary to make a decision of this magnitude. In advanced countries 'expert information and advice can be obtained at reasonable hire from individuals familiar with the trade or from experts in market analysis.' There is not only a lack of experts with a framework of experience but also an almost complete lack of data on which the advice can be based.

Uncertainty and the increase in risk consideration not only arises from the lack of information and expert advice but also from experience. In many underdeveloped countries prosperity and therefore the size of market has depended on the price of one or two export commodities. These have shown ^{very} great price fluctuations and effected the levels of prosperity very considerably. In such countries the uncertainty of demand for consumer goods would be great and militate against long term large investments for their production.

Given these difficulties traditional forms of investment would seem attractive even to those who manage to look outside the traditional investment pattern.

There is no easy way out of the problem of shortage of entrepreneurs. There may however be some measures that may prevent the shortage from being a critical bottle-neck in economic growth.

There is somewhere in our concept of the entrepreneur a hidden idea that he must be an individual, a captain of industry. There is also the idea that he must be directly associated with the ownership of the project if he is to bring out his unique capacity. We also include in our concept of the entrepreneur profit-motive in exclusion of other achievement motives. Thus the entrepreneur is unique to the private enterprise system.

The first question that we may ask is whether entrepreneurial activity necessary for economic growth has to be from some individual. Entrepreneurial functions in the growth of rubber and tin industries of Malaya were performed by Agency Houses. In other countries they have similarly developed the tea and coffee industries. In India a part of the textile industry and very large part of jute manufacturing industry were developed by managing agencies. Many of the foreign firms set up in underdeveloped countries are branch factories - fully or partly owned subsidiaries. Here again entrepreneurial activity is by organizations rather than a individual or groups of individuals come together for that particular entrepreneurial act.

The main part of the entrepreneurial functions in underdeveloped countries appear to have been performed by organizations rather than individual adventurers. Even in industrialised countries, the entrepreneurial functions - inventions, innovations, risk taking, organization, co-ordination control have moved away from individual entrepreneurs however spectacular they may be, to organizations. Large efforts require large teams rather than individuals to perform all these functions. "In very small enterprise, of course, these functions can be performed by a single person - the proprietor. In larger establishments, there may be a division of functions among complex hierarchy of individuals...Organizations can be quite simple or very complex depending upon the nature of the business activity the size of the term and the technology employed." 31

Many of the individuals in hierarchy are not owners of the capital investment in the projects. They are often employees whose monetary incentive is not profit but salary. We may have to find some substitute for profit motive as the power that makes business executives and entrepreneurs tick. In some countries the salary levels are very high but this is not immediately and directly related to profits. Human motivation is often most complex, and there is no reason to suppose the motivation of

entrepreneurs (i.e. those in organizations performing entrepreneurial functions) is simple matter of profit.

Once we cease to think of the entrepreneur in terms of the Schumpeterian hero, and think in terms of organization, the problem facing underdeveloped countries in the scarcity of entrepreneurial capacity may not be as difficult as it would otherwise seem. Where it is difficult to import an entrepreneur (almost invariably with risk-capital) in the traditional sense, it is not nearly as difficult to recruit personnel to fill places in entrepreneurial organizations. To supply an individual capable of performing many of the functions may be extremely difficult, if not impossible. Individuals who may not by themselves be able to perform the role of the 'entrepreneur', in association with others in an organization may perform the particular task allotted to them adequately.

There is less need to wait for Godot. Under developed countries may be able to set about putting a Godot together!.

Conclusion

All the discussion can be summarised within the framework of supply and demand for capital. Over-population affects the supply of capital not in usually suggested way that is decrease savings, but by decreasing the capacity to save. It also increases the magnitude of the task of development. The supply of saving may be marginally increased but it would not be very much until development has gathered some momentum. Supply of foreign private capital on which much hope was placed has not lived up to expect expectation. The little that does come has gone mostly in industries that are not strategic to economic growth. A growth-oriented government appears to have greater scope as a supplier of capital - both as mobiliser of domestic capital and borrower of foreign capital. This role may be more important in the early stages of development than when development has got going.

On demand side we have size of markets and lack of external economies and social capital preventing the use of the capital that may be available. A synchronised balanced growth of some scale may in some cases be a break-through. Such an effort has to be largely that of governments. Investment of social capital is beyond the capacity of private enterprise and little or no contribution can be expected as it is not directly profit making. Even the part that could be profit-making would have to be on a scale of complementary industries that some sort of consortium would have to be brought into being. Here again if a rapid rate is required governments would have to play an increasingly important role. It may not be necessary that this effort would have to be exclusively that of governments. However there is little doubt that if the 'vicious circle of poverty' that keeps underdeveloped countries where they are, there has to be massive government effort in areas which has been in many countries the preserves of private enterprise.

Finally the bottlenecks of lack of skills and entrepreneurial scarcity are more likely to be broken by governmental action. The common statement that 'you cannot make entrepreneurs out of civil servants' is not as profound as it may seem. Can we make 'civil servants' into motor car manufacturers (Renault), developers of utilities, transport services, communications, real estate operators (Singapore Housing Boards and Housing Boards all over the world). Is there all that difference between the employee of giants like General Motors, Socony, Shell etc. and civil servants. None of the employee's can be said to own these companies. Some of them may be stockholders but it can hardly be said that it is this stockholding that make them entrepreneurs and consequently more competent in industrial activity than civil servant. Many of these companies have more employees and have larger profits than the annual revenue of many of the small underdeveloped countries.

"Entrepreneurship in large private corporations depend on much the same incentives as entrepreneurship in public corporations...the major incentives are ambition, desire to do one's job well, desire for promotion to higher salary and desire for recognition."³² And at certain levels it is the desire for power.

If civil servants are inadequate for entrepreneurial function it not because the incentives in civil service make it impossible so attract the kind of talent private enterprise is able to, but because civil servants are neither recruited nor trained for entrepreneurial or managerial functions. Where governments desire to create an entrepreneurial and managerial cadre it is likely that they would be more successful than private enterprise at least in the early stages of industrial development.

The central point of my argument is that we should cease to think of government as purely politico-administrative organizations. They can also be entrepreneurial-managerial organizations. There is no valid theoretical reasons why they cannot be as successful as private organizations. What is more important is, in underdeveloped countries, government may be the only organization that can perform this task on the scale that is necessary to break the vicious circle of poverty. They may be the only organizations that can produce the rate of growth required in these areas.

It is not necessary for the purposes of this paper to go into details on the role of governments as initiators of the growth process in Japan, Germany,³⁴ France,³⁵ and even in the United States³⁶. State entrepreneurial activity as the initiator of industrial growth has respectable middle-class and even aristocratic roots.

From the arguments in this paper I think it follows that the lack of governmental entrepreneurial activity is an important cause of underdevelopment

31. F.Harbison: Entrepreneurial Organization as a Factor in Economical Development. in Okun: Studies in Economic Development. Hoft Renhart & Winston. New York 1961. pg. 311.
32. W.A. Lewis op. cit. pg. 81
33. W.A. Lockwood: The State and Economic Enterprise in Modern Japan 1868-1938. S.Kuznet. op. cit: pg. 537-602
34. W.O. Henderson: The State and the Industrial Revolution in Prussia Liverpool University Press. Liverpool 1958. pg. XIII-XXIII
35. B.F. Hoselitz: Entrepreneurship & Capital in France & Britain since National Bureau of Economic Research. op. cit.
36. E.A.J. Johnson & H.C.Kross. The American Economy Prentice Hall Inc. New Jersey. 1960 pg. 186-7.