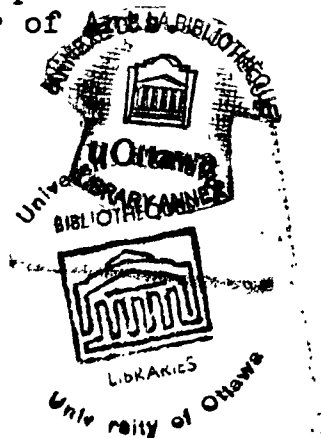


CAPITAL FORMATION IN UNDERDEVELOPED COUNTRIES

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INTRODUCTION

Economic development is primarily associated with an increase in capital per head. Capital formation thus turns out as a significant aspect of problems of economic advancement. In this thesis, general approaches to problems and processes of capital formation in economically unde^{de}veloped countries are attempted.

Supplementary conditions required for economic progress are also associated with social and financial institutions that give incentive to economic effort; with attitudes and will of people to devote their talents and energy to their progress; with international co-operation in trade and aid; with technical knowledge and training to improve productivity; and with endowed human and natural resources which provide for opportunities. Concentration on the problems of capital formation will be given in this thesis, but the importance of these related aspects, even though they are considered as supplementary conditions to our concern, is also recognized because capital formation can not be carried out without these conditions. However, considerations are only limited to those which are concerned with capital formation.

Chapter I of this thesis will be devoted to the study of problems of capital scarcity in unde^{de}veloped countries, the effect of market and financial institutions,

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as well as problems of capital absorptive capacity of those countries. Sources of capital are chiefly two: domestic savings and foreign investments which are to be discussed in Chapters II and III respectively. Approaches to human and natural resources in relation to capital formation are made in Chapters IV and V. Finally, a summary of the conclusions will be drawn after all of the problems in regard to capital formation are considered.

The term capital in the economic sense is always related to investment. Capital is taken as a stock of assets; investment is a flow or addition to the capital stock. Capital formation will be defined in this study as the stock of goods of all kinds in the hands of producers, housing and durable physical assets in the hands of people and governments, and the net stock of international financial claims. Saving is a source of capital. But the most preferable capital is that which is productive and which takes the form of investment. Hoarding of cash or foreign currencies or gold ornaments is a type of saving but considered as non-productive capital.

The problem of saving was discussed with contradictory views by leading economists. From the classical standpoint, an increase in the supply of saving stimulates capital accumulation by causing the rate of interest to fall. Full employment being assumed, savings at the expense of consumption may,

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however, lead to an effective release of scarce resources without which the production of capital goods could not take place. J. M. Keynes argued from a different point of view that if funds are diverted from consumption they may be hoarded rather than invested. The logic of Keynes' theory was ably exposed by J. R. Hicks¹, i.e., that more saving is wasteful. It causes income to fall, but it leaves interest rates unaffected. Keynes was criticized because his hypothesis is plausible only for the short run and less applicable to secular growth.

This thesis is primarily concerned with the problem of capital formation in under^{de}veloped countries. The arguments of both the classical school and Keynes are less applicable to those economies. The burning issue confronting underdeveloped countries is capital scarcity and there is neither danger of excessive saving nor gap between consumption and income. There may be a "vicious circle of poverty" which implies a "circular constellation of forces tending to act and react upon one another in such a way as to keep a poor country in a state of poverty"². On the supply side, the low

¹ William Fellner and B. F. Haley, ed., Readings in the Theory of Income Distribution, Philadelphia, 1946, pp. 461-476.

² Ragnar Nurkse, Problems of Capital Formation in Underdeveloped Countries, New York, Oxford University Press, 1955, p. 6.

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real income results in a meagre margin of saving which in turn provides for little capital for investment. The income is again low. On the demand side, there is little inducement to invest because of small purchasing power of the people which is due to low income. Income is low because of the low productivity which again is due to the low level of investment. The vicious circle of underdeveloped countries is only breakable by an increase of capital formation and investment.

What is an underdeveloped country? The concept of it is sometimes misleading. There is no abrupt distinction to separate the underdeveloped from the developed areas when countries and regions are placed in an array, as factors are complex and accurate measurement seems very difficult. It is a comparative rather than absolute idea. In so far as natural resources are concerned, Canada is "underdeveloped" in comparison with England, whereas the latter falls behind Canada in the field of per capita income and material welfare. But both of these two countries are much advanced in comparison with Asian countries. At the extremes the contrasts are dramatically sharp, but in the middle ranges blurring is unavoidable.

The idea of development and underdevelopment is only concerned with the level of material well-being and economic satisfaction. Outside the economic sphere an underdeveloped country may be highly developed in art, philosophy, religion or general civilization.

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The usage of underdeveloped countries in this study refers to those countries which share a common condition: their production, their income and their living standards are low. This usage would cover most of Asia and Africa, the Near and Middle East, South-eastern Europe, the Caribbean Islands and Central and South America.

The conditions of those underdeveloped countries are by no means identical. Some are confronted with population pressures -- most of Asian countries; some are exposed to tropical climate -- Indonesia, Malaya and much of India; some are chiefly short of natural resources -- Nigeria and Caribbean countries, etc.

In this study, examples and sometimes theoretical expositions will be made largely with respect to countries in South-East Asia and the Far East. First, it is because that area constitutes a major part of the present underdeveloped world, and secondly, books and materials are comparatively available in this field. However, since this study is a general approach to processes and problems of capital formation in all underdeveloped countries, it does not limit itself to a particular test case.

CHAPTER I

LEVEL OF CAPITAL

1. Capital Scarcity in Underdeveloped Countries

Professor Ragnar Nurkse once irrelevantly but philosophically remarked, "A country is poor because it is poor".¹ This statement characterizes the crude fact envisaged by all undeveloped countries. A country which is economically advanced or backward is usually judged from the standpoint of the available capital per head; those considered as poor ones are of necessity faced with an important problem of capital scarcity.

With low per capita capital, economic activity is carried out without the assistance of large quantities of the capital assets such as machinery and equipments which are commonplace in wealthier and advanced countries.

The general implication of a low level of capital is a low level of output which in turn results in a low level of national income. With a low level of income the propensity to consume is so high that little is saved and left over for investment. Yet without large additions to the stock of

¹ Ragnar Nurkse, Problems of Capital Formation in Underdeveloped Countries, Chapter I.

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capital available for production, the consumption of the people must be low, not only because of the quantity produced is small, but also the quality of output is lower than that of wealthier societies. In bumper years people in many underdeveloped countries may enjoy having sufficient foods in quantity, whereas when drought, flood or rainy years come to them, dreadful famines bring a large number of people to furious desperation. It is because their economic societies are so poor that there is nothing saved to enable them to improve their lot. In ordinary times, a large number of peasants are customarily working on farms barefooted because they can not afford to buy a pair of shoes. Poor people welcome warm summers and greatly fear harsh winters, because their shelters as well as their clothes are not good enough to keep them from cold. Transport costs are high because technically efficient transportation equipment and good roads are lacking. However, the recent fact that famines have been gradually kept from large parts of the under-developed world during the last century is evidence both of increasing capital formation and of more general economic improvement in these countries and international willingness¹⁰ provide an aid.

The general effects of a low level of capital in underdeveloped countries tend to be aggravated by factors which reduce the economic effectiveness of most available capital. Agricultural equipment or transportation facilities which

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are owned by a few "rich" persons may be used in a very limited extent. Technical improvement or invention made in one area can not be spread to other areas because of poor communications. The effectiveness of available capital assets may also be curtailed by the narrowness of markets. The capital assets available in one area may not be sold and used in other parts.

It is a commonplace in underdeveloped countries that labor is relatively cheap and capital expensive compared to wealthier countries. The difference between the prices of labor and capital will have an effect on all economic behavior and production methods throughout the economies. In countries where capital is abundant relative to labor, capital equipments and machinery will be designed for the economical purpose of labor-saving. In most underdeveloped countries, especially where populations are densely settled, it would be fantastically uneconomic to equip each worker, in building a road, for example, with a bulldozer. Much simpler tools and equipments would be appropriate to the labor-abundant countries, because labor substituted by machinery would become unemployed when other sectors of the economy are not able to absorb them; and again, more capital would be necessary for training of operators, purchase of oils and maintenance tools because the economy is not diversified enough to have them available.

In underdeveloped countries where capital is scarce, many economic activities are carried out with little or no

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capital. There is a massive substitution of labor for capital. In the vast rural areas of China, India and many other countries, shipment of goods to local markets which are usually held once for each five days are still carried by means of manual baskets or carts. In Korea, one hundred or more pounds of things are very often carried on human shoulders. A study of South Africa shows that nearly one-third of the women's time is "taken up in fetching wood and water for household needs, stamping and grinding meals by hand for cooking, and in keeping the thatch, walls and floors of their living huts".² It is indeed a feature of backward economies in which capital equipment of all kinds is meager that much economic activity may consist very largely of fetching and carrying.

It is safe to say that more than ninety percent of agricultural activities in all underdeveloped countries is still dominated by manual labor. The scarcity of capital affects agriculture in that it is difficult for peasant cultivators to replace producing assets by technically superior varieties which give larger and better quality yields. Capital is often lacking to acquire the new stock. Farmers cannot afford to forego a large part of current income in exchange for the high deferred income which would be available technically. Capital scarcity makes countries like Japan, India,

² P. T. Bauer and B. S. Yamey, The Economics of Underdeveloped Countries, The University of Chicago Press, 1957, p. 119.

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Pakistan, etc., take measures to expand labor-intensive industries which might yield cheaper products compared with those labor-scarcity countries in the same field. Exports of these goods may exchange for imported capital goods according to the theory of comparative advantage.

A common phenomenon in most of the backward countries in which labor is plentiful and capital scarce appears that much labor is often spent in prolonging the life of capital equipment of all kinds, and capital equipment is kept in use after it has reached a condition in which it would be scrapped in wealthier countries. The exports of second-hand machinery from advanced to underdeveloped countries afford a general illustration of this phenomenon. Even if the useful life of capital assets is often extended by repeated repairs, yet the actual life may nevertheless be shorter than in more advanced economies because of the low-level technical skill both in using and in repairing them.

However, few countries are content today to permit the continuous existence of poverty in the form of capital scarcity. Measures are deliberately and purposefully sought through domestic and external economic steps taken to that end. Professor P. A. Baren believes that the only way to prevent a continuous deterioration of living standards is to assure a steady increase of total output at least larger than that necessary for offsetting the rapid expansion of the

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population.³ Output can be increased mainly by increase of capital investment.

2. Effect of Market on Capital Accumulation

The extent of market exerts great influence upon capital formation as well as economic development. The size of market depends upon the degree of self-sufficiency, upon the size of population, upon the conditions of communication, upon money facilities, upon tastes and demand of consumers, and upon national income.

In most of the backward areas, the village economy is still dominant, such as China, India, and many South American countries. In China, for example, many inland villages on a subsistence basis require money only for the purpose of buying from towns and cities things they can not secure locally. A small amount of inter-village trade takes place, but for most part the village is self-sufficient, and the width of the market is limited by the size of the village. Every village has a number of skilled men, but they supply only a fraction of the villagers' want. The primitive household is almost completely self-sufficient. Specialization is limited. As Professor Nurkse argued,⁴ Say's law⁵ would be valid in under-

³ Paul A. Baren, "National Economic Planning", A Survey of Contemporary Economics, ed. by Bernard F. Haley, Vol. II, Homewood, Ill., Richard D. Irwin Inc., 1952, p. 307.

⁴ Ragnar Nurkse, Problems of Capital Formation in Underdeveloped Countries, Chapter I.

⁵ Say's Law; Supply creates its own demand, is criticized by J. M. Keynes as contradictory to the fact.

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developed countries in the sense that there is no "deflationary gap" between income and consumption, and production creates its own demand, and the size of market depends on the volume of production.

The size of market also depends upon the size of population. Manufacturing industries and public utilities would enjoy substantial economies of scale as the population increases. Brazil, Australia and Greenland, for example, can not afford to have highly specialized industries without foreign trade. Their transportation facilities, electric power, social security measures, schools and hospitals, etc. are relatively expensive because their populations are not big enough to support mass-production in those fields.

The conditions of communication have a significant effect upon the size of market and industrialization, because the joining of separate villages and local markets requires communication. The lack of roads prevents movement of goods and people. Many peasants of older generations of China were born and died within very narrow areas as big as forty square miles. Their world was so narrow that they did not get in touch with the rest world. There were no newspapers, no mail and little literacy which would enable advantage to be taken of them. The village is remote from large markets. Dr. Sun Yet-sen assumed the development of highways and railways

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throughout China,⁶ to be of first importance. He planned a network of railways and highways running east and west and north and south to be imposed on China to joint it together in one interconnecting economy. The far-off internal cities and villages would be connected to the all important eastern ports by this communication network. Agricultural products in inland areas could be sent to those coasted cities where food products might be exchanged for goods and capital equipment for their agricultural and industrial advancement. Not only the food surplus can be taken away from the farms and made it available to the city, but the "disguised" unemployed people can be drawn into the city. But in the city they must be fed and that is why food must move off the farm through communication and market processes to the city. The country could be changed from a subsistence economy to an exchange economy by means of communication and widening markets.

The widening market requires an extension of the use of money which must be brought about by a sound development of money and banking system. The use of gold and coin as money may limit the size of market and lack of financial institutional facilities will handicap savings and capital formation. This problem will require a substantial discussion in next section.

⁶ Sun Yat-sen, International Development of China, Ministry of Information of the Republic of China, 1943.

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The size of market also depends upon the tastes and standardization of demand of consumers. Highly diversified and unstandardized demand will handicap the industrialization because it causes excessive inventory, idle machine time, increasing labor cost, and ineffectively diversified capital investment. In markets where everybody wants to show his superior status by buying commodities of individual design or articles fashioned specially for his requirements, markets for each type will be small. Rapid capitalization thus requires a society in which wealth distribution is relatively equal and the middle class dominates the demand for goods. Capital formation will be easily directed by profit motives toward more or less standardized industries. Tastes of consumers must be coordinated with industrial simplification and standardization. Unnecessary diversification of commodities, especially in underdeveloped countries, could be a form of waste.⁷

Low per capita national income is one of the principal attributes of less developed countries. Low personal incomes are reflected in a pattern of expenditure which is very unfavorable to manufacturing industries. The lower the income the higher is likely to be the proportion spent on food. The market for manufactured goods is curtailed.

⁷ Richard N. Owens, Management of Industrial Enterprises, Homewood, Illinois: Richard D. Irwin, Inc., 1954, Chapter XVI.

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The inadequacy of the extent of the market affects capital formation in several ways. First of all it offers no attraction to industrial capital. The inducement to invest is limited by the size of the market. It is generally recognized that in the poor countries the use of capital equipment in the production of goods and services for the domestic market is prevented by the small size of that market, by the lack of domestic purchasing power. In so far as foreign capital is concerned, the underdeveloped countries are likely to be regarded as no more than a marginal market, capable of being served from manufacturing plants located in more favorable sites.⁸

The fact that average personal income is comparatively low in underdeveloped countries constitutes an obstacle to the application of capital by any individual firm and industry working for that market. Generally speaking, consumers with low income care for goods with comparatively lower quality and price. This may constitute an advantage for establishment of small factories. However, these are very often the goods for which mass production methods are most appropriate. In supply of these types of goods, a newly established small factory may find itself at a very disadvantageous position in competition with larger producers in exporting countries. This difficulty

⁸ Henry G. Aubrey, "Investment decisions in underdeveloped countries", published in the book entitled Capital Formation and Economic Growth, a report of the National Bureau of Economic Research, New York, Princeton University Press, 1955, pp. 397-440.

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can exist even in very large countries with large population such as China and India.

In the event of a limited domestic market in the sense of insufficient demand, a possibility of expanding production for sale on foreign markets should be taken into consideration. This may be a significant means of accelerating industrial development in early stages of backward economies. Great Britain, Japan, Belgium and Switzerland are good examples. Manufactured goods are exported in large quantities in exchange for imported raw materials and food for their own need. And again, in competition with these main exporting countries, the newly established industries in backward countries would be in a disadvantageous dilemma.

It follows from the above arguments that in making a final decision on investment, a firm has to consider the size of the market in two directions: the size of total demand for the product and the share of the total market which will be the target of the contemplated enterprise. And it is inevitable that the extent of the market exerts great influence on investment decisions and capital formation.

Nevertheless, the vicious cycle of poverty is not unbreakable, but it calls for industrious and decided efforts of their people and governments working towards their goal of modernized industrialization.

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3. Aspects of Financial Institutions

This section is concerned with effects of financial institutions on capital formation in underdeveloped countries. The central banking facilities, the money market and the capital market in various forms are inadequate in most backward countries. In modern advanced economies financial institutions have not only spread, but they have developed to great complexity, while in agrarian societies the majority of the population makes little use of money because relatively few goods are exchanged. Rents, and sometimes taxes, are often paid in kind. Paper currency has become attractive only after World Wars. It is now, however, used everywhere in the world. As a result of this situation, central banks in many underdeveloped countries came into being only recently. In South-East Asia and the Far East, for example, the central banks of Pakistan, the Philippines, Burma and Ceylon came into being after the Second World War as the result of their newly acquired political independence. Korea, China and India founded their central banks after the First World War. There is no central bank as yet in Indochina, Hongkong, Malaya and Singapore.⁹ With these newly founded central banks, they are getting into position to make a major contribution of mobilization of domestic savings.

⁹ United Nations, Mobilization of Domestic Capital in certain Countries of Asia and the Far East, 1951, ST-ECAFE-4, pp. 15-16.

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As Arthur I. Bloomfield¹⁰ points out, the great majority of central banks in underdeveloped countries are fully owned by the government. Many of the central banks are characterized by usually wide and flexible powers. In the field of capital formation central banks with sufficient powers can contribute in several ways. First, they can supervise commercial banks and thus encourage the use and improvement of such institutions. Secondly, the central banks may take steps in issuing government securities. And thirdly, central banks may advise the government, or directly control exchange and imports. Of course, they may also promote monetary stability and regulate money supplies so as to conduce to healthy levels of employment, national and economic development.

A sound money and capital market would offer savers enough protection to encourage them to lend to investors. The distinction between money market and capital market is that the former consists of all sources of short and medium term credits and the latter covers long-term credit and investment. In the advanced industrial communities the investors are to a very large extent using savings mainly out of undistributed profits, while in the early stages of industrialization of

¹⁰ Arthur I. Bloomfield, of Federal Reserve Bank of New York, wrote on "Some Problems of Central Banking in Underdeveloped Countries", The Journal of Finance, May 1957, p. 190.

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most underdeveloped countries, capital out of these resources is quite limited. The flow of savings from lenders to borrowers depends largely on the channel of banking facilities.

In most of the underdeveloped countries the organized money market is concentrated only in urban areas. Arthur Robert Burns illustrated that commercial banking entered most of these countries in the form of foreign banks, often British, German and American in India, China (before 1949) and Latin America, and French in Indochina and the Middle East and Chinese Banks in Malaya, Hongkong and Indochina.¹¹ United Nations' investigations of Asia and the Far East also give the similar results.¹² These foreign banks have an "extremely influential place", and specialize particularly in foreign trade finance. However, commercial interest rates appear to be nearly comparative with such rates in other parts of the world. It is because of the limited and selective use of the facilities.

For the majority of the people, especially in rural areas and for small-scale industry and trade, the financial facilities are in the "unorganized market" of the money lender. Here interest rates are very high. This constitutes a key problem for capital investment. The basic economy of the

¹¹ Arthur Robert Burns, Comparative Economic Organizations, New York, Prentice-Hall, Inc., 1955, p. 501.

¹² United Nations, Mobilization of Domestic Capital in Certain Countries of Asia and the Far East, 1951, pp. 33-38.

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underdeveloped countries is agricultural, with small-scale industries and trade. The possible contribution that might be secured is restricted by the costly burden of rural finance.

United Nations experts suggest three steps on this point.

They are: first, further encouragement and specific inducement to the extension of commercial banking to rural areas; secondly, encouragement of consolidation of numerous small banks and extension of their supervision by the central banks; and thirdly, so far as the usurious money-lender is concerned, simple laws and regulations may have a salutary effect.¹³

In Burma, Ceylon, India and Pakistan, it is found that a cooperative movement may solve many of the fundamental difficulties. However, in training of cooperative leaders, administrative guidance is required.

So far as the advantages of capital market are concerned, an easy flow of savings from lenders to borrowers may be facilitated because of limited liability and easy marketability of assets. In most countries the law usually takes the view that the whole fortune of a sole-proprietor or partner of a business is liable for the debts of any undertaking in which he participates, and not merely that part of his fortune which he invested in the undertaking. With the modern capital market, limited liability creates a thoroughfare for investment in the sense that an investor who invests for a share of

¹³ Op. cit., p. 41.

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the profits, who delegates his managerial rights to directors under control, is liable to creditors of the undertaking only to the extent of his investment. This limited liability makes it possible for thousands of people to participate in a venture without committing the whole of their private fortunes. And again, the lender is able to restore his liquidity easily by selling his right to payment or the borrower's assets when defaulted. This is mainly a function of a capital market in which the bonds, shares, mortgages and titles of exchanges are marketed. On the contrary, the marketability of financial securities is by no means an obstacle which can render difficult operation of the business.

The development of well-organized stock exchanges is not complete in most underdeveloped countries. Public issues and purchase of securities are quite limited. United Nations' investigations of the South-East Asia and the Far East concluded that stocks exchanges available for most part were confined to India, Hongkong, the Philippines, Pakistan and Singapore, and only a limited amount of capital resources has been accumulated in the private industrial and business sector.¹⁴

However, financial institutions through which savings are accumulated may take many different forms. In practically

¹⁴ United Nations, Mobilization of Domestic Capital in Certain Countries of Asia and the Far East, 1951, p. 66.

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every underdeveloped country, postal savings and commercial banks are most wide spread institutions for mobilizing the savings of individuals on a voluntary basis. Even so there are large areas where savings banks and postal facilities are not available. In India only about 40 percent of the villages with a population of 2,000 or over are provided with postal savings banks¹⁵. Korea offers a large number of savings services through the post office which partly explains its relative success in securing wide spread participation.¹⁶ But the interest paid on deposits is frequently low in most of the underdeveloped countries and the annual amounts of savings are small.

Because of the magnitude of the rural sector of the economies of most underdeveloped countries, the mobilization of rural money savings through appropriate institutions was one aspect of widening savings for economic development. Insurance companies are an important agency for the mobilization of the savings and make funds available for long-term investment. But insurance facilities are also confined almost entirely to urban areas of many underdeveloped countries. It is also suggested that compulsory national provident fund schemes, and building and loan societies should be promoted.¹⁷ The

¹⁵ Op. cit., p. 136.

¹⁶ Op. cit., p. 228.

¹⁷ United Nations, Mobilization of Domestic Capital, 1952 (E-CN.11-I&T-63), p. 19.

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scarcity of organized facilities of industrial financing has resulted in various experiments by those governments which include direct grants of funds by governments, special corporations financed wholly or in part by governments, as well as the use of government guarantees to attract private resources for investment.

4. Capital Absorptive Capacity

It is safe to say that all backward countries want to accelerate their economic progress so as to catch up ^{with} a high standard of living of advanced economies. Suppose adequate sources of capital required for investment in certain industries are developed. Can a country absorb capital without limit and at any rate? The answer might be negative. Each country has a limited capital absorptive capacity. Capital is essential to an economic development, but the problem of economic development cannot be solved only by increasing supply of capital. The absorption of capital rests in part upon the availability of complementary factors with which the capital is to cooperate and also in part on the maintenance of economic stability without inducing unnecessary inflationary pressure and disequilibrium of balance of payments. The practical issue is whether haste is better made precipitately or slowly.

Probably the important limiting factors are the supply of raw materials, the lack of technology, the shortage of

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skilled personnel, deficiency of trained managers and able entrepreneurs, the general economic organization of the society, and the low geographic mobility of labor. In an expanding economy each industry will depend upon the growth of others. The productivity of each factor of production also depends upon the adequacy of other factors, and the benefits of each to the others are augmented by their very interdependence. The deficiency on the supply of factors other than capital will result in a sharp decline in the marginal productivity of capital. It is very often argued that capital would be more productive in underdeveloped economies than in advanced economies because of its scarcity. This is true. But as capital is increased to a certain level, marginal productivity would sharply decline because of the bottlenecks in the availability of other factors or economic organizations. It is believed that the inadequacy of technical knowledge in underdeveloped countries can be aided by technical assistance from advanced countries.¹⁸ However, the supply of raw materials, the economic organizations as well as immobility of labor could be improved only with prolonging efforts by domestic measures.

Indeed, the rate at which modern equipment can be installed and therefore the amount of capital funds which can be

¹⁸ President Truman's Point Four Program was initiated in his inaugural address, January 20, 1949, for this purpose.

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productively employed in economic development during any year is limited. The main limiting factor, as Eugen Staley argued,¹⁹ may not be the capital goods, it may be instead the social resistance of the people to changes in habits, for the coming of industrialism imposes drastic changes. Sir Sydney Caine²⁰ also emphasized this point that industrial development is a social process, involving much more than the mere installation of machines. Economic developments do not take place in isolation. As more wealth is produced, new problems in its distribution and utilization may arise. Fundamentally, it is educational, organizational and political rather than mechanical. The rate at which new capital can be absorbed is closely related to the rate at which new ideas can be absorbed.

Apart from the inadequacy of complementary factors and social adjustments, the absorption of capital is also limited by the requirement of maintaining economic stability without inflation and disruption of unfavorable balance of payments. The problem of inflation resulted from insufficiency of capital absorptive capacity in underdeveloped countries engages the attention of many modern economists.²¹ There are some reasons

¹⁹ Eugene Staley, World Economic Development, Montreal, International Labor Office, 1944, p. 69.

²⁰ Sir Sydney Caine, "Education for Development", The Advancement of Science, Vol. XIV, No. 55, Dec. 1957, London, England, pp. 191-200.

²¹ See "Economic Growth and Inflationary Pressures,

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for believing that the multiplicity in inflationary forces is more evident in the underdeveloped than in the industrial countries. Inflationary pressures in underdeveloped countries are characterized by the inadequacy of the rate of savings to finance the growing requirements for investment. A major inflationary trend in the richer countries is likely to be a cost-price type of inflation while ^{the} chief influence in underdeveloped countries is monetary expansion. Investment in underdeveloped countries is likely to be financed by budget deficits while a great extent of investment in industrial countries is from the retained earnings.

Arguments can be advanced that a constant rate of investment tends to produce a growing gap between effective demand and productive capacity of the economy. If investment rises too rapidly effective demand will grow faster than capacity to produce and the economy will be subject to inflationary pressure.²² Economic policy must be geared against too rapid a rise in effective demand because it may generate a wage price spiral. Savings will be handicapped and capital formation is likely to be hindered when there is an increase in the general price level. Even if unused resources and unemployment do

United Nations, World Economic Survey, 1956, p. 3, and G. M. Meier & R. E. Baldwin, Economic Development, New York, John Wiley & Sons, Inc., 1957, p. 351.

²² Gerald M. Meier & Robert E. Baldwin, Economic Development, p. 352.

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exist, the market imperfections, ignorance and immobility, as such as the structure of production may prevent from adapting itself rapidly to the pattern of demand. Therefore, inflation may develop side by side with unemployment and underemployment. United Nations experts²³ warned that severe inflationary pressures may be generated even in the absence of budget deficits. Unless an adequate part of the underutilized resources and man power is devoted to the expansion of consumer goods in line with rise in investment, the underdeveloped economy is "either chocking off its economic growth or frustrated by unendurable inflationary pressures".

When the accumulation of capital exceeds the capital absorptive capacity, the balance of payments of the country will fall into disequilibrium difficulties. The process of economic development will generate a need for foreign exchange, but the imports surplus, if without adequate control, could be dissipated on luxury imports to the disadvantage of the development programs rather than the capital equipments which are urgently needed. The significant effect could be that a rapid investment stimulates inflation and export industries are confronted with increasing cost with diminished exports. And moreover, foreign investments in such a country could be

²³ United Nations, World Economic Survey, 1956, p. 5.

deterred.²⁴ If this type of balance of payments difficulties occurs, capital growth must be handicapped because there could be no foreign exchange available to import the necessary raw materials and capital equipment. This would require a reduction in domestic consumption and investment. Therefore, the rate of investment must be influenced by the desirability of maintaining a sound relationship of imports and exports.

Rapid industrialization with fast capital investment might be well exemplified by the economic development of Japan between the two world wars and Russia after revolution. But, Japan, as pointed out by Buchanan and Ellis²⁵, had a free hand in the rich Chinese North-East Territory with a vast area of nine provinces (the so-called Manchuria) and also had a dominant position in the inner part of China. The problem of supply of raw materials and other resources was solved. Russia's success was mostly regarded as due to its efficient planning and control. Communist China now is following the Russian way. But most of the remainder of the underdeveloped world shows a weakness of government and a diffusion of purpose which do not make for a maximum tempo of industrialization.

²⁴ United Nations, Processes and Problems of Industrialization in Underdeveloped Countries, 1955, p. 72.

²⁵ Norman S. Buchanan & Howard S. Ellis, Approaches to Economic Development, New York: The Twentieth Century Fund, 1955, p. 287.

In general the underdeveloped countries are anxiously demanding a rapid industrialization. Their ambitions for speed in economic development may be too high to be met. We must expect that there may be disappointment.²⁶ Where development takes hold, success itself will often create problems, as long-accustomed social and economic patterns are broken, and new societies emerge with the new economies. The determining factors in the speed of their development are likely to be the will to save to meet the investment demand. Their ability to do that will require effective, strong and competent government. The willingness of the more advanced countries to cooperate effectively, not only in lending capital and technical assistance, but also in organizing a sound foundation of interacting security and steady trade is essential.²⁷ Inflation as well as balance of payments difficulties must be controlled directly or indirectly.

²⁶ Economic Development Assistance, Committee for Economic Development, p. 14.

²⁷ Eugene Staley, World Economic Development, p. 75.

CHAPTER II

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1. The need for saving

Since rapid economic growth is generally unattainable without substantial investment, it follows that saving should occupy a prominent place in the course of economic development because investment has to be matched by savings. If the rate of investment has to be a certain minimum, say 10 to 12 percent¹ of national income in order to break the vicious circle of poverty, then, apart from external aid, domestic consumption has to be reduced and internal resources have to be mobilized to a corresponding extent.

The conditions of economically underdeveloped countries are such that their production, their income and their living standards are low. They produced in 1955, on the per capita basis, in all underdeveloped countries of the Free World, only about \$100 worth of goods and services a year, compared with \$2,000 in the United States and with \$1,000 generally in the better developed parts of Europe

¹ W. A. Lewis, in his Theory of Economic Growth, points out that industrial countries tend to invest between 10 to 15 percent of their national incomes, while poor countries save 5 percent, P. 202.

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or Australia.² The rate of saving in any economy is higher when total income is large. Families with annual incomes of \$3,000 a year ordinarily save a higher percentage of their incomes than those with \$2,000 a year, and those with \$4,000 save a still higher percentage. The percentage of income saved tends to rise as income rises. Also, countries with high average income levels tend to save a larger percentage of income than those with lower income levels. The per capita income of all underdeveloped countries is so low that they try their best to keep from starvation. Savings are very often negative. The higher the productivity and living standards achieved by a given country, the higher the rate of savings is likely to be. But the productivity and living standards are universally low in backward countries. The problem of savings, therefore, is urgent but extremely difficult.

As increasing investment and industrialization is the first step if underdeveloped countries are to lessen their poverty, savings are needed, otherwise investment cannot be made. Of course, foreign capital and assistance would be helpful, but outside assistance cannot be relied upon at all times, therefore the fundamental effort must come from the people of underdeveloped areas. They must not only

² Economic Development Assistance, Committee for Eco. Development, p. 8.

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desire economic growth, they must also be willing to devote their energy, talent and resources to it. However, savings must be done no matter what method is used.

Nevertheless, it may still be asked whether voluntary savings get into investment automatically. Modern economists insist that savings, on the one hand, and investment or capital formation, on the other, are made by the decisions of two quite different groups of people, influenced by quite different motives. Decisions to vary the rate of investment are made by entrepreneurs in accordance with their prospective expectations, whereas the decisions that determine the rate of savings are made by the public seeking to accumulate resources for future use or consumption.³ Neither of these decisions is made with any consideration or calculation of what the other decision may happen to be. Savings, even when they are designed to find their way into investment, do not reach their goal by any automatic or direct process.

On the contrary, there is a possibility which most classic economists overlooked that an increase in saving may discourage investment rather than lead automatically to increasing investment. An increase in savings, being equivalent to a decrease in spending, reduces the expectations of all

³ J. M. Keynes first pointed out that savings and investment are made by different groups of people and they are not adjusted to each other automatically.

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entrepreneurs producing consumption goods. They tend, therefore, to reduce their output and employment. It is theoretically possible that increasing thrift will discourage investment. However, this possibility that the level of saving may be so high that investment opportunities may be checked may happen only to those richest countries. In the less developed countries there is no such danger, because the level of their savings is very low.

It is generally recognized that ^{not} people in those underdeveloped countries are (in very few cases) ^{not} willing to save to a large extent. There are various reasons. Because of inflationary pressure, liquid assets may cease to be the safest form of wealth. Their incomes may be too low to allow them to save, or the small margin of savings are very often used for non-productive purposes such as for gold ornament, religious and social festivities or exportation or hoarding of capital surplus. Quite apart from the willingness of private persons to invest if they could find the money, governments are usually overwhelmed with projects for spending on roads, water supplies, flood control, irrigation, electric power, schools, hospitals, etc. What restrains this investment is not lack of demand, but simply the lack of saving to finance it. In these cases the need for investment is so great and the actual savings out of the public so low that there would be a gap between investment and savings.

Then, because of the unavailability of indigenous private capital, a strong inclination usually exists in most of the underdeveloped countries for economic development through governments. The South-East Asian governments, for example, have a capacity to raise investment capital from tariffs, taxes, and government monopolies.⁴

The underdeveloped countries are notable because they place economic development high among their demands. And they understand that economic investment could not be carried out without possessing adequate capital. What processes are being taken to make capital formation possible? Domestic as well as foreign sources are to be considered respectively in the following sections.

2. Domestic Private Sources

Savings through domestic voluntary sources should be a basic and natural way in financing industrial requirements. The growth of a sound economy depends to a large extent upon the willingness of the people to save and to invest. People must spontaneously dedicate their own effort and resources to long term investment. They must sacrifice their luxury and comfortable life of consumption in exchange for a future wealth. However, throughout the economically underdeveloped

⁴ John Perry King, South-East Asia in Perspective, New York: The Macmillan Company, 1956, p. 212.

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world with only rare exceptions private voluntary savings are limited. Factors causing the low level of voluntary savings are numerous.

First of all, very low per capita incomes make saving difficult and the scarcity of saving in turn holds incomes at low levels. In the very low-income countries the majority of people suffer from poverty, illiteracy and poor health; they are not unwilling to save but cannot afford to save. Actually peasants and low-income earners learn to be thrifty chiefly because they know how near they live to the brink of disaster,⁵ and that their safest way is to put up part of their present consumption in order to protect themselves against the vicissitudes of life. Individual voluntary savings in this sense may fail to come to fruition in productive investment. Those peasants who save may seek to transfer their savings into buying land, or hoarding gold and foreign exchange or lending to those less fortunate peasants, and in neither case it results in an increase in capital formation. Investment in land may be a wasteful use of savings because the productivity of the land is hard to increase only by "change of hand". Hoarding of gold and foreign currencies may also cause much saving to be lost to the society.⁶ A favorable

5 W. Arthur Lewis, Theory of Economic Growth, p. 227.

6 Op. cit., p. 229.

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aspect of hoarding may be a general deflationary effect on prices and incomes. Lending to those less fortunate peasants may do nothing to capital formation because the money borrowed by those less fortunate must be used for urgent consumption.

Saving is the part of income not consumed, and, therefore, there is a close relationship between consumption and saving. Individual consumption functions are interrelated, first, through the desire for social emulation by means of conspicuous consumption. This is a point that can explain consumption and saving habits which prevail in most economically backward countries. A second way interrelated consumption function may exist is that people have a desire of "keeping-up with Jones". When people having superior goods, new materials, new ways of satisfying human wants get in touch with those having only inferior goods, a lower standard of consumption, the former has what Professor Ragnar Nurkse laboriously described as a "demonstration effect"⁷ on the latter, never the other way round. Even if their incomes are low but they are restless in want of getting higher satisfaction, their propensity to consume is thus shifted upward. And the interdependence of consumers' preferences may significantly affect the choice between consumption and savings. The amount

⁷ Ragnar Nurkse, Problems of Capital Formation in Underdeveloped Countries, Chapter III.

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of saving by an individual depends not only upon the level of his real income, but also on his adjustment of consumption to the superior income level of other people with whom he may come in contact. It is often suggested that progressive taxation may take off this certain amount of increased income while equalitarian redistribution by taking a part from the rich to be paid to the poor may have an adverse effect on aggregate saving because this may stimulate personal consumption demands.

The demonstration effect of consumption standard may exert itself unevenly in different income groups in underdeveloped areas. It may be concentrated among the upper income groups in the cities and little on the village area of peasants. Perhaps the groups affected most are the salaried middle classes. One after the other would like to show his peculiarity and social importance. However, it is widely recognized that the main source of savings in any economy is profits, distributed or undistributed. And the profit making people are more likely to be thrifty and less likely to be affected by the attraction of higher consumption standards, because the mere fact of their independent status as profit makers and as employers of other people, combined with their known wealth, assures them some social prestige. They are ambitious for power which is built up on the accumulation of wealth. Therefore, the group of profit-making people would be most willing to engage in investment and capital formation.

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A possible solution to the demonstration effect is that governments of those underdeveloped countries should take steps to isolate their own countries with the rest world in the aspect of consumption standards. Social education as well as special tariff on imported luxury goods may be effective. It is well know that Japan in the early course of her industrialization imitated the Western world in every thing except consumption patterns.⁸ This was part of the secret of her success in domestic capital formation and industrial development. Russia is another example in accumulation of capital by compulsory policy and preventing her people from being attracted by higher consumption standards by a strict "iron curtain".

The willingness of people to accumulate savings depends also upon the attractiveness of savings in comparison with spending. The creation of desirable standards of spending and saving is essential to economic development. One important deterrent to personal savings is inflation, since most people have no satisfactory means of protecting their savings from depreciation due to inflation. When prices have risen steady for years, the will to accumulate savings in the form of deposits, government bonds, or life insurance is undermined

⁸ Daniel Lloyd Spencer, Japan's Pre-Perry Preparation for Economic Growth, The American Journal of Economic and Sociology, Vol. 17, No. 2, January 1958, pp. 195-224.

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and eventually destroyed. Once assurance is given against loss from inflation, the will to save can be quickly restored. It is also possible to increase saving to some extent by offering savers the opportunity to acquire more attractive saving assets. In India, in the Philippines, savings and development bonds are available in small denominations.⁹ If inflation were avoided and more attractive savings assets provided, people might be induced to hold savings assets other than hoarded gold, silver or foreign exchange, a form of saving which provides no resources for development. A high rate of interest may also induce the public to increase its savings. Although the government as well as the private industries will have to pay a high rate of interest for their investment, still it is reasonable to pay a high rate of interest to attract savings, for savings have a high value in an underdeveloped country. In an advanced country, like the United States, more than five-sixth of business investments is supplied by retained profits.¹⁰ In an underdeveloped country business enterprise should be encouraged to increase their savings and to finance more of their own investment needs. It would be desirable to provide more favorable tax

⁹ United Nations, Mobilization of Domestic Capital, 1953 (Sales No. 1953, 11.F.4), p. 82.

¹⁰ E. M. Bernsterin, Financial Problems of Underdeveloped Countries, The Journal of Finance, May 1957, p. 170.

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provisions for retained than for distributed profits.

According to¹¹ United Nations investigation,¹¹ the recent capital formation in the private sector of Japan and the Philippines accounts for the bulk of their total capital accumulation. It is almost 75 percent of gross capital formation in these two countries. In Japan the policy of monetary restrictions effective since October 1953 is designed to secure the required funds for capital formation out of voluntary savings of the private sector, instead of relying excessively on credit creation by banking institutions. Various measures have been taken in the Philippines to encourage private investment in industries. These include tax exemption for new and essential industries, protection for domestic industries through drastic reduction of imports of competing goods, and exchange facilities for importing the capital goods and raw materials needed by these industries. In other countries in Asia like Ceylan, Burma and India, emphasis for capital formation is put on public capital, while in Thailand there is an Industrial Promotion Bill recently passed by Parliament seeking to provide financial and other facilities to private enterprise, and in Pakistan, the Pakistan Industrial Development Corporation and the Pakistan Finance Corporation have been instrumental in promoting private investment in industry. The

¹¹ United Nations, Economic Survey of Asia and the Far East, 1954, p. 49.

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Republic of China is following a policy of selling Government enterprises to private interests on suitable terms. Under the "Land-to the-Tiller Program", four government corporations were handed over to landowners who part with their land against payment partly made (30 percent) in the form of stock in these enterprises. Landowners who sell their land to the "tillers" through the Government are obliged to buy in part the stock of these four corporations with their revenue. This may be also a way of forcing private capital going into industries.

In order to encourage voluntary domestic sources of savings, adequate measures generally required are appropriate fiscal policy as well as the availability of financial facilities. Actions could be taken to educate and induce the public to save for the benefit of ^{the} nationally material prosperity. A simple type of so-called self-help local work project could be introduced under the sponsorship of government. Those people who share the consumption but const^Rtribute little to production in the rural areas in the form of disguised unemployment could be induced and directed to constructive work. The value of their added labor is a form of increased national income. As for financial institutions, they were discussed in the ^{is} last chapter. Inflation and other public measures are to be considered later.

3. Deficit Financing

In view of the fact that the normal rate of voluntary savings is not expected to be as high as the requisite figure of investment, it is often suggested that a certain degree of deficit financing in the earlier stages of economic development may actually be desirable. What is deficit financing? Professor Gardner Patterson of Princeton University,¹² defined deficit financing "as a net increase in the amount of money in circulation, such increase being the result of conscious governmental policy designed to bring about economic activity that the officials believe desirable and that otherwise could not have taken place". In other words, deficit financing as a net increase of money is assumed not to be offset by taxation or tight bank credit. And then one comes to the questions of whether budget deficits necessarily lead to inflation. And even if they are inflationary, can they lead to a greater mobilization of capital than is otherwise possible? These questions are discussed in the present section of the thesis and in addition, considerations are also given to the nature and extent of inflationary measures generally adopted in the present underdeveloped countries.

The term budget deficit refers to the excess of cur-

¹² Gardner Patterson, "Impact of Deficit Financing", The Journal of Finance, May 1957, pp. 178-189.

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rent expenditure over current receipts from taxation and from revenues of government enterprises. If the deficit is financed by borrowing the idle savings of the public, it need not be inflationary. Again, if the deficit is matched by an import surplus, no inflation need result. But in many instances, budget deficits are financed by the "created" new money from the banks. It is sometimes contended that deficit financing is not particularly harmful even when budget deficits lead to an increase in the money supply.¹³ There are two reasons in favor of this. First, in underdeveloped countries, with poor investment facilities, the propensity to hoard currency is a very common phenomenon. The impact of additional money on the economy may merely counteract the hoarding. Secondly, underdeveloped countries have considerable unemployed or underemployed resources and therefore the extra purchasing power resulting from deficit financing would induce an expansion in the output of goods and services.

The use of deficit financing to offset the private hoarding of currencies and induce unemployed resources into production is effective only for exceptional circumstances and within a limited range. In normal cases, it is doubtful that hoarding of currencies by those poor people can be large enough to counteract deficit financing for new projects.

¹³ United Nations, Mobilization of Domestic Capital, 1952, pp. 35-36.

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Again, the extent of transference of unutilized or idle resources in underdeveloped countries into productive industries is also limited. As Professor Patterson¹⁴ indicated, skilled labor of all kinds is almost always scarce and therefore the most we can hope for from a policy of deficit financing is to bid it away from its present occupations into more productive ones. Much more serious are the bottlenecks of the shortage of engineers, managers, entrepreneurs, foremen and operators of complex equipment. In the absence of them, the output of unskilled labor transferred to the new jobs may be very small, and the danger of inflation from their employment appears very large. The unskilled labor can be induced to the new projects without directly reducing the production of the rural sector. However, in most underdeveloped countries, such a change of occupation will be needed for many changes in areas of residence from rural to urban areas, new transportations, etc. are required. There are direct and indirect offsets to the increase in production. The scarcity of machinery or tools, no matter how rudimentary and simple they are, constitutes another serious bottlenecks for the effective use of the unskilled labor.

An alternative way of getting capital works done

¹⁴ Gardner Patterson, "Impact of Deficit Financing", The Journal of Finance, May 1957, p. 180.

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without inflation as suggested by Professor W. Arthur Lewis¹⁵ is to persuade people to work on them without payment. It is indeed feasible in rural areas if the works in question are of strictly local interest, and if they are likely to benefit nearly everyone in the village. But such activities are not without cost to the government. It involves necessary administrative services, organization of the people, planning and propaganda on the one hand, preparation of required raw materials as well as technical assistance on the other. And most of all, this type of capital formation is limited by the fact that people will work only on projects of strictly local interest.

There is another possibility that in all underdeveloped countries there is a large non-monetary sector (rural areas with little requirements for money) which in the normal course contributes little to savings and investment; and a mild dose of inflation generally tends to bring this sector into the orbit of the money economy and thus make it more effectively contribute to the process of investment. Once the economy is monetized, the money income ratio (the ratio of money in active circulation to the national income is always much less than one) in underdeveloped countries tends to be

¹⁵ W. Arthur Lewis, The Theory of Economic Growth, p. 219.

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especially low; that is, the economies are very sensitive to deficit financing. Continued, even moderate, deficit financing tends to be inflationary, and so the question becomes: Is inflation a feasible way of increasing savings in these areas? The answer to this question lies very much in the structure and organization of the economy. Its tremendous social significance arises from the fact that it always does affect people and classes differently.

Inflation takes wealth away from some people and hands it over to others in a manner which disregards the maxims of social equality.¹⁶ However, it seems to increase the profits of the industrial and mercantile classes and by so doing increases their savings, but it causes hardship to all with salaries and other fixed incomes. On the other hand, inflation has at least advantages over taxation. It requires no administrative skill or machinery to engineer an inflation. And the detrimental effects of inflation need not be severe. As the development projects are completed, production will begin to rise, and new savings and taxes will be available to bridge future budget deficits. By redistribution of income in favor of the rich, inflation may actually lead to a more savings and investment. Again, as the development plans

¹⁶ Dudley Dillard, The Economics of J. M. Keynes, London, Crosley Lockwood and Son Ltd., 1954, p. 238.

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are completed, some of the bottlenecks to higher production would be removed, and new investment opportunities would emerge. These opportunities would in themselves be an inducement to higher savings. It is why that many economists believe that if the inflationary effects of deficit financing can be kept relatively mild, there may be a significant increase in the useful saving of the economy.¹⁷

However, the case of capital formation by inflation needs to be accepted with great caution. There are numerous disadvantages of inflation as a source of capital formation, in addition to its arbitrary and anti-social incidence. It will be thought useless to work and save in a society where large profits are to be earned through market speculation in an inflationary situation. The pattern of investment and production could be distorted by inflation. Cost and price relations are distorted, resources are misapplied. It induces people to make speculative investments in trade and industry which offers prospects of inflationary profits and to neglect other fields of investment which are of real and permanent benefit to the community.¹⁸ There will be no urge to save, given continuous inflation, in ways which may involve a loss

¹⁷ Buchanan and Ellis, Approaches to Economic Development, p. 309, and United Nations, Mobilization of Domestic Capital, 1952, p. 39.

¹⁸ Op. cit., p. 6.

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of capital. In most underdeveloped countries, the peasants constitute the largest occupational group. Farmers have shown that they have their own ways of meeting an inflationary squeeze: hoarding of their produce. This is a form of saving, but it rarely contributes to increased production. The rise of the prices of the hoarded produce will push the entire economy on to a higher inflationary level.

An attempt to force savings from the peasants by inflation may have other undesirable and self-defeating consequences. The farmer may be expected to maintain consumption by dissaving. These dissavings may quickly reach large dimensions. The farmer may attempt to maintain consumption by postponing repairs on their houses and farm buildings or by skimping in the care of their land and animals.¹⁹

Continuous inflation induces a flight of capital abroad and repels foreign capital. Imports are subsidized and exports are penalized. Balance of payments difficulties result.²⁰

The worst consequences of inflation occur when prices have risen so much or for so long that people lose confidence in money. What happened in China in the post-war period from

¹⁹ W. Arthur Lewis, The Theory of Economic Growth, pp. 222-223.

²⁰ Buchanan & Ellis, Approaches to Economic Development, p. 311.

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1946 to 1950 was hyper-inflation,²¹ which resulted not only in dissavings but seriously injured the government.

From the above analysis we come to the conclusion that if inflation is used for capital formation great caution must be taken. It is best done in small doses at a time, rather than continuously. Although inflationary financing may expedite capital formation in certain circumstances, such a course is full of pitfalls; and the amount of increased net savings which can be forced by inflation among the labor or farmer groups who constitute a very large proportion of the population of underdeveloped countries, is likely to be small.

Before we proceed to another topic, let us take an example given by the International Monetary Fund ^{on Table I} and see ^{to} what extent some of the underdeveloped countries use deficit budgets as a source of capital formation.

It is evident that inflationary pressures, if left unchecked, may adversely affect the capacity of capital formation. Anti-inflationary measures should be adopted. First, public deficit financing should be controlled. Secondly, governments should try to bridge the gap between public expenditure and public revenue. Taxation of incomes and of luxuries and semi-luxuries is a possible source of additional revenue. And

²¹ It was my memory that inflation was so wild that wage-earners always rushed to the markets as soon as they got their pay envelopes. The general price level was pushed sky-high.

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TABLE I
CENTRAL GOVERNMENT INVESTMENT²²
AS A PERCENTAGE OF DEFICITS²³

Year	Ceylon	India	Pakistan	Burma	Philippines	Thailand	Indonesia
1947-48	156	120	34	394	0	180	...
1948-49	130	64	65	0	183	158	19
1949-50	115	193	55	194	61	42	33
1950-51	121	101	102	764	63	82	163
1951-52	77	110	...	59	86	...	...

Source: United Nations, Mobilization of Domestic Capital 1952,
Sales No. 1953, 11.F.2, P.43.

²² Capital outlay and loans and advances to local governments for capital outlay.

²³ A comparison of investment expenditures with budget deficits conveys in percentage terms the impact of these expenditures on the budgets. Investment expenditures in some cases may exceed deficits.

thirdly, fiscal as well as monetary measures should be used to combat a wild inflation.

4. Public Sources of Capital

One of the inexorable features of economic development in almost every country of the world seems to be a rise in the share of the government in the national income. Since 1930's the principle of "laissez-faire" seems to have been discarded and the role of government in all economic activities tended to increase. In so far as capital formation is concerned, there are three major functions left for the government to take. They are: first, taxation, borrowing and other measures both compulsory and voluntary; second, allocation of capital in the desired direction for economic development by direct public investment or by control of private investment; third, maintenance of financial stability by adjustment of the balance of revenue and expenditure. Most of these functions are discussed in this section and part will be left for Section 5 of this chapter.

The chief sources of the revenue of government are direct taxation and indirect taxation such as custom duties and others. Direct taxes include taxes levied on personal and business income, profits, capital gains, gifts and so on. Whatever deficiencies in tax revenue after direct taxes must be made up by indirect taxes. In the economically underdeveloped countries there is considerable dependence on export and

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import duties, sales and other indirect taxes. As shown in Table II, from 60 to 90 percent of revenue is from indirect taxes.

Adjustment is made to this Table in the case of Burma, Indonesia, the Philippines and Thailand. The Profits of the State Marketing Board in Burma and of the Rice Bureau in Thailand are another form of export duties, but do not appear in the statistics of customs returns. Similarly the profits arising out of the exchange certificates system in Indonesia and the proceeds of the foreign exchange tax in the Philippines are in reality customs revenue although not shown in the customs returns.

If comparison is made with industrial countries, government revenues in underdeveloped countries depend more upon customs duties than in advanced countries. Customs duties of the United Kingdom were 22 percent of total government revenue in 1950 and in the United States the share of federal and state tax revenue obtained from the source is 0.9 percent.²⁴

The United Nations Economic Commission for Asia and the Far East indicates that the total government tax revenue in those underdeveloped countries varies from about 10 percent of gross national product (e.g. in the case of India and the

²⁴ Buchanan and Ellis, Approaches to Economic Development, p. 326.

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TABLE II

DIRECT AND INDIRECT TAXES AS PERCENTAGES OF
TOTAL REVENUE IN THE SOUTH-EAST ASIA
AND THE FAR EAST COUNTRIES

Countries	Year of Reference	Direct Taxes	Indirect Custom Duties	Taxes Other Indirect
Burma	1950-51	13	33	54
Cambodia	1951	13	71	16
Ceylon	1950-51	19	71	10
China: Taiwan	1951	33	24	43
Hongkong	1949-50	36	..	64
India	1951-52	28	52	20
Indonesia	1951	15	18	67
Japan	1951	59	1	40
Korea	1951-52	32	10	58
Laos	1951	17	80	3
Malaya	1951	14	80	5
Pakistan	1951-52	14	64	22
Philippines	1950-51	22	6	72
Singapore	1951	42	..	58
Thailand	1951	5	35	60

Sources: United Nations, Mobilization of Domestic
Capital, 1953 (E-CN.11-L&T-81), p. 39.

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Philippines), to about 15 percent in the case of Malaya, and over 20 percent in the case of Ceylon²⁵. In contrast, public revenues are about 40 percent of national income in the United Kingdom, 28 percent in Australia, 31 percent in Canada, and 25 percent in the United States.²⁶

Another form of government revenue occurring from foreign trade comes from fiscal monopolies which represent a combination of domestic excise and export taxation. For example, Burma's State Agricultural Marketing Board and the State Timber Board monopolize the export of rice and timber respectively. It is also true for the Thailand rice monopoly by Thai Rice Bureau.²⁷ Taxes can also be levied upon domestic consumption and capital and property. However, revenue from these sources is relatively small in most of backward areas.

The financial resources raised by governments through borrowing are rather limited in most underdeveloped countries. Government borrowing includes additions to the permanent debt, floating debt and unfunded debt. The floating debt includes treasury bills and ways and means advances. The unfunded debt includes post office savings deposits and certificates. There are special causes for the low volume of borrowing, because

²⁵ United Nations, Mobilization of Domestic Capital, 1951, p. 69.

²⁶ Op. cit., p. 70.

²⁷ United Nations, Mobilization of Domestic Capital, 1953, pp. 40-41.

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in underdeveloped countries the habit of saving is insufficient, the organized markets for government securities as well as commercial banks and insurance companies are inadequate, and most of all there are public fears of inflationary pressures.

The second function of public finance in capital formation is the economic development by government investment or by control of private investment. In most countries of the underdeveloped world, ^{as Table III indicates,} development expenditures of the public authorities have been concentrated on public services such as transport and electric power; on irrigation and flood control measures designed to increase the output of agriculture; and on expanding the capacity of export and other industries.

The initiation of development programs in most of the underdeveloped countries has resulted in an increasing importance of public investment relative to private investment. One important factor which has contributed to the increased importance of public investment is the fact that post-war foreign investments and aid have come mostly through public channels such as loans from the International Bank for Reconstruction and Development and United States Government grants and loans.

TABLE III
 PERCENTAGE DISTRIBUTION OF PUBLIC EXPENDITURE ON DEVELOPMENT
 IN SELECTED SOUTH-EAST AND THE FAR EAST COUNTRIES

		Agriculture Forestry & Fisheries	Multi- Purpose Projects	Transport & Communi'tn	Fuel & Power	Mining	Ind. & Research	Social Capital	Average ²⁸ Annual Total Expendit.
Burma	1953-55	12.8	....	36.4	15.2	2.3	17.6	15.7	477.5
Ceylon	1953-55	26.4	11.4	25.6	8.9	...	5.4	22.3	375.2
India	1953-55	26.8	13.8	24.9	7.0	...	5.3	22.2	4663.4
Indonesia	1953-54	9.7	12.3	24.1	4.2	0.4	33.8	15.5	1625.1
Malaya	1953-54	4.8	6.2	17.8	9.5	0.1	....	61.6	117.9
Nepal	1953-54	28.6	....	19.3	21.2	1.2	16.6	13.1	9.9
Pakistan	1953-55	20.6	12.0	24.0	7.2	...	15.5	20.7	1002.0

Source: United Nations, Economic Survey of Asia and the Far East, 1954,
 p. 51.

²⁸ In millions of national currency.

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In the maintenance of financial stability by adjustment of revenue and expenditure, many governments are now faced with the choice between deficit financing to maintain expenditure, with the risk of inflation, or the reduction of expenditure to maintain stability. To avoid the inflationary dangers governments may be compelled to increase revenues by taxation and borrowing. In addition to the public sector, the following Table provides the data of relative proportion of gross capital formation, saving and development including both public and private sources of countries in Asia and the Far East.

In view of the public source of capital, there might be conflicts between taxation revenue and investment. For the purpose of capital formation, tax concessions might be in many cases desired to influence the direction of investment, for example, to discourage speculative investments in unproductive activities and to increase the productivity of various sectors of significant industries. Industrial development may be stimulated by means of tax concessions on reinvested profits in the form of either an exemption from income tax on the amount ploughed back, or reduction in the tax rate or the tax base. While tax concessions may be granted in order to promote favored activities, penalty taxes may be imposed on courses of action which are contrary to the government's industrialization policy. Tax incentives may sometimes be directed at influencing potential investors, workers,

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TABLE IV
GROSS DOMESTIC CAPITAL FORMATION, GROSS SAVINGS, AND DEVELOPMENT
EXPENDITURES AS A PERCENTAGE OF GROSS NATIONAL PRODUCT

	Burma	Ceylon	India	Indonesia	Japan	Korea S.	Malaya	Philippines
	<u>A. Capital Formation</u>							
1938	13.0	5.9	...	...	25.9	...	...	...
1947	16.2	5.3	...	...	26.4	...	...	11.4
1948	17.0	6.3	8.3	...	28.2	...	...	12.1
1949	8.1	9.1	9.1	...	24.6	9.6	11.1	10.5
1950	10.2	10.7	9.3	...	24.9	...	5.1	8.3
1954	21.8	10.0	...	...	23.5	7.9	...	8.4
	<u>B. Savings</u>							
1938	25.1	9.0	...	...	23.3	...	...	...
1947	6.2	-0.2	...	...	22.3	...	...	4.9
1948	10.6	7.0	5.7	...	24.1	...	...	9.0
1950	15.2	14.6	9.7	...	27.6	...	23.1	9.0
1951	18.9	15.2	8.2	6.0	34.2	...	29.9	6.0
1954	19.5	16.3	...	...	25.2	-5.8	...	6.5
	<u>C. Development Expenditure</u>							
1949	...	...	...	...	...	...	...	13.3
1950	11.7	17.7	...	...	...	...	6.1	10.9
1951	14.7	18.9	11.3	6.6	...	...	7.8	9.6
1954	25.0	17.3	11.4

Source: United Nations, Economic Survey of Asia and the Far East,
1955, p. 10.

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landowners or any group that is likely to be involved in the process of industrial development. For example, low income tax on manufacturing industries and heavy income tax on agriculture would make landowners change their investment direction and workers transfer from agriculture into industries.

The importance of other role of government is straightforward increasing in the mobilization of capital for economic advancement in every country. Because of the difficulty of capital accumulation from private voluntary sources, a strong inclination exists in many of underdeveloped countries for economic development through government initiative, financing, management, and ownership. In the present underdeveloped world where socialist theories have made little imprint, the tendency toward nationalized industry and government planning and regulation of the national economy rests on practical considerations. The reasoning is that the governments are the major source of capital accumulation, that they monopolize the services of the limited number of people who possess technical, financial and administrative experience, that, as a result, the process of economic development is speeded up by economic planning and government regulation and that time and resources are thereby saved.²⁹ In the underdeveloped world view, the tasks of development are too urgent and the economic needs too

²⁹ John Perry King, South-East Asia in Perspective, pp. 212-214.

great to leave economic growth to trial and error or to the caprice of individual initiative or to the free operation of the laws of supply and demand.

5. Social Overhead Capital and Investment Criteria

The rate of industrialization and capital formation in any country depends heavily upon the adequacy of certain basic economic facilities such as public utilities, education, etc. In the absence of these basic facilities the yield of any initial capital may turn out disappointingly small. And this situation happens chiefly because the basic economic facilities are short or inadequate. It is, therefore, a mistake to assume that the return on a unit of industrial capital invested in an underdeveloped country is likely to be greater than that invested in an advanced country. Nor is it generally true that the early investment of capital in an underdeveloped country is more productive than the later investment. In many cases the initial investment of capital in many underdeveloped countries may produce no immediate tangible return at all.³⁰ And it is very plausible having regard to the fact that public utilities make very heavy demands on new capital in the initial stages of economic development, whereas in the later stages their demand is more for maintenance expenditure and less for new extension due to the economies of scale. That is why

³⁰ United Nations, World Economic Survey, 1955, p. 11.

investment in an economically backward country is likely to be much more productive at a later stage, when the economic environment has been made more favorably by previous investment in the building up of basic facilities. The capital which needed to provide for these basic facilities to make additional investment in industry profitable is called "social overhead capital".

Of the overhead capital, classical school has given two examples: educational facilities and means of transportation and communication. Education they felt, would serve to slow down the rate of population increase but would at the same time, lead to increased efficiency. Thus Senior referred to good education as "a kind of mental raw material".

J. S. Mill saw a connection between education and entrepreneurial ability and spoke of intellectual speculation as "the most influential part of the productive labor of society". Of transport facilities, J. S. Mill held that "good roads are equivalent to good tools". And similarly Senior saw in good transport facilities the means of counteracting the principle of diminishing returns. In practice, the inadequacy of education facilities as well as a transport system in many underdeveloped countries are a major force tending to inhibit investment either from foreigners or domestic investors.

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In other cases absence or insufficiency of electric power may constitute a serious obstacle to capital formation. The disparity of electric power between advanced and backward countries is tremendous and evident. In recent years it is this disadvantage from which most of the underdeveloped countries have suffered in varying degrees. That is why the industrialization in underdeveloped countries is extremely slow in comparison with advanced countries.

The absence or the high cost of essential services, commonly known as social overhead cost, quite frequently compels industrialists to provide their own power facilities, sometimes even their own transportation facilities, and such other services as those for repair. Large inventories are required because a network of industrial supplies is still lacking, raw materials have to be stored in the absence of efficient forward markets. These shortcomings raise the requirements for working capital in addition to fixed capital.

Of importance to investment in public works and utilities is the growing importance of public investment in relation to private investment. Since private capital in underdeveloped countries is far from capable of taking up such vast areas as public facilities and since governments have the advantages in these fields, the proportion of government investments thus rises abruptly almost in every country. Many governments of the less developed countries have resolved to

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TABLE V
ELECTRIC POWER: INSTALLED CAPACITY
AND PRODUCTION, 1952

Area	Installed Capacity (1000 Kilowatts)	Production (Millions of Kilowatt Hour)
World total	270,751	1,139,013
Industrial Countries	247,731	1,061,523
North America (a)	107,453	524,842
Western Europe (b)	85,026	304,348
Eastern Europe (c)	12,620	50,600
USSR	28,000	116,400
Japan	11,270	51,647
Australia & New Zealand	3,362	13,686
Underdeveloped Countries	23,020	77,490
Africa	4,069	17,463
Asia (excluding Japan)	3,734	11,862
Latin America	11,796	36,435
Eastern Europe (d)	1,904	7,000
Others	567	2,002
Percent in underdeveloped Countries	8.5	6.8

Source: United Nations, Monthly Bulletin of Statistics, November 1953.

(a) Canada and the United States.

(b) Europe, excluding the two groups of Eastern Europe Countries.

(c) Czechoslovakia, Hungary and Poland.

(d) Bulgaria, Romania and Yugoslavia.

take over responsibility for these investments, but they have discovered that the sums involved would mean an enormous expansion of government expenditure beyond what they are in a position to finance.

In an underdeveloped country, the enormous investment in irrigation, power and similar projects is intended to provide the basis for additional investment in agriculture and industry. But when allocation of resources for investment is taken into consideration it is particularly important that the limited resources should be invested in those fields in which they will make the greatest contribution to production because underdeveloped countries are invariably short of resources even for the most important projects they are capable of undertaking profitably. In a sense, much of the investment in supply of the basic utility resources may be wasted unless there are complementary investments in agricultural and industrial production that use these services.³¹

The government has great advantages in acquiring whatever resources are available for public investment. It has direct access to these resources through the taxing power, the profits of public enterprises, and the proceeds of various special funds. It has indirect access to these resources through borrowing from the public and the banks. Government securities can be sold whenever desirable. When a large

³¹ United Nations, World Economic Survey, 1955, p.12.

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proportion of the total resources available for development is used for public investment, it is evident that too little of the available resources is left for private investment or for agriculture and industry. This is a very common phenomenon in most of underdeveloped countries. Shortage of resources will fall upon private investment. The consequence may be to retard development for lack of complementary investment in agriculture and industrial production.

When one proceeds from the general requirements of capital accumulation to the more specific requirements of allocating the additional expenditure, it becomes necessary to establish some investment criteria.³² It is economical to employ available capital in each use to the point at which the marginal return to the capital in it is equal to that in all alternative uses competing for the limited capital. The optimum distribution of capital will not, however, result in identical ratios of capital to output in all economic activities. Alternative criteria will affect total output differently. Labor or other resources are not equally good substitutes for capital in all lines of activity or in all circumstances. There are differences in the capital intensity of techniques of production available in different sectors of an economy, and there are also differences in the techniques

³² Henry G. Aubey, "Investment Decisions in Underdeveloped Countries", in Capital Formation and Economic Growth, pp. 379-440.

available to different producers. A certain investment criterion may also maximize total output at different periods.

The most general criterion of investment should be that of productivity. The general rule of productivity is that investments should be made in those industries where the social marginal productivity is the highest (i.e. one additional dollar invested in a particular industry would contribute more to the society as a whole rather than a similar investment in other industries). And then several aspects of the problem come up. Should a given volume of investment be allocated in a manner that maximizes the ratio of current output to investment? Should that investment be selected that would maximize the ratio of labor to capital? Or, should the investment be allocated in a manner that will maximize the ratio of export goods to investment?³³ In the first place, we may think that the most productive investment is in agricultural projects that require a large amount of labor. This raises income in agriculture. But the increased income will not assure higher savings and capital formation if the population in this sector grows fast or if consumption of farmers increases. Investment decisions will differ according to the

³³ These questions have been emphasized in the following articles: a) Walter Galenson and Harvey Leibenstien, Investment Criteria Productivity and Economic Development, The Quarterly Journal of Economics, LXIX, August, 1955, pp. 343-370; b) Hollis B. Chenery, "The Application of Investment Criteria", The Quarterly Journal of Economics, LXVII, Feb. 1953, pp. 76-96.

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future shape of economic development which is desired. Secondly, if the ratio of labor to investment is considered, heavy machinery will not be economical in most of overpopulated countries. That is sound if the wages of labor relatively to the price of capital is so low that it can compensate for the greatly inferior physical productivity of the manual methods. But it has sometimes been found that the choice of methods of production may also be influenced by the scarcity of technical and supervisory personnel. Thirdly, arguments may be favored that investment should be allocated according to a balance of payments criterion as well as a productivity criterion. If the poor country is particularly prone to balance of payments difficulties, one may favor investments that reduce imports or increase exports.

And again a concept of "productive" investment should be worth distinguishing from unproductive investment.³⁴ The building of luxury housing is a favorable target of criticism while the construction of housing per se is accepted as essential. It is agreed that in the absence of luxury expenditure, the unconsumed surplus would be used in a better manner -- that is one which furthers future development. This kind of thinking, however, does not conform with the investment criteria for solely profit purposes of entrepreneurs. Hence some unproductive and "speculative" investment may be entirely

³⁴ Gerald M. Meier & Robert E. Baldwin, Economic Development, pp. 402-403.

logical and desirable for the individual investor while appearing undesirable from the stand point of a policy aiming at rapid development of the economy as a whole. Moreover, the time preference and priority of the entrepreneurs may differ from the socially determined time schedule.³⁵

One should take an over-all view of the pattern of investment and realize that the various sectors of the economy are interdependent. This requires what is called "balanced growth" which in the language of G. M. Meier and R. E. Baldwin³⁶ indicates that social rather than industrial or private productivity is the relevant investment criterion, and that attention be given to the creation of external economies. It is apparent that investment should be made in such a manner that the various parts of the economy can move forward in balance. An increase of non-agricultural production will also require an expansion in agricultural production, unless the country can expand its non-agricultural exports and import more foodstuffs and raw materials such^{as} England and Japan do. A balance is also necessary between domestic demand and foreign trade. Export revenue is an important source for financing development and the domestic market itself requires increasing imports of necessary materials and equipment. The

³⁵ Norman S. Buchanan & Howard S. Ellis, Approaches to Economic Development, p. 393.

³⁶ G. M. Meier & R. E. Baldwin, Economic Development, 1957, p. 347.

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domestic sector must grow in balance with the foreign sector.

CHAPTER III

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1. International trade and capital formation

To help finance their economic development, most of the underdeveloped countries are anxious to utilize the channels of international trade to expand their export earnings so as to exchange for capital goods they need.

Potentially foreign trade is one of the chief instruments of industrialization in the hands of the underdeveloped countries. Its value for this purpose depends directly on the nature of the commodities imported and the terms of trade, and indirectly on the inflow of capital and the degree of internal economic stability. In general, economic activities in underdeveloped countries are low chiefly because their own domestic markets are limited. If they are able to export and to capture foreign demand for their goods in exchange for foreign capital, this is usually the upward turning point which sets a country on the road of economic development.

In general, the main exports of underdeveloped countries are largely primary products which contribute to industrialization in the sense that they lead to the establishment of processing factories. India and Pakistan, for example,

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have made considerable investment in mills and processing facilities for their raw products of jute.¹ In Chile, domestic smelters have been substantially established for refining their mined copper.² The availability of local raw materials is an important advantage in the development of manufacturing industry. However, the overwhelming bulk of exports from the less developed areas still consists of primary products and the expansion of secondary industry is dependent upon export earnings in exchange for imports of capital equipments.

There is a possibility that as export earnings increase, imports of consumption goods may increase more than capital goods. And there is also a possibility that economically desirable capital equipment which is designed by foreigners, if imported, may not be suitable for local specific domestic purpose and not very productive because of shortage of engineers, technicians, spare parts or other complementary factors which so often constitute a bottle-neck in the economic development of underdeveloped countries. The purpose of increasing domestic capital by means of foreign trade becomes a difficult task to an underdeveloped country. However, every country is trying its best to increase its foreign trade and improve its terms of trade whenever possible.

¹ India Progress & Plan, The Economist, Jan. 22, 1955, pp. 2-20.

² United Nations, Processes and Problems of Industrialization in Underdeveloped Countries, 1955, p. 75.

Improvement of the terms of trade in favor of underdeveloped countries could be equivalent to an international income transferred from the industrial to the primary producing countries. A rise in the prices of exports of these countries increases their export proceeds and makes it possible for them to import larger quantities of capital goods needed for their economic advance. But it is often argued³ that this advantage of potential source of capital formation may not be achieved automatically. This depends upon whether the country has the raw materials available to supply the increasing demand from the industrial countries. During the boom of Korean War, for example, Japan obtained a considerable extra of foreign capital by supplying technical services, ammunition or providing recreation facilities for the "rest and recuperation"⁴ of United Nations Forces from Korea. The price of such strategic materials as tin and rubber, during the early months of the Korean War, increased so rapidly that the price of tin at one point rose 300 per cent over pre-Korean War levels, and during the years 1950 and 1951 Indonesia, Malaya and Thailand experienced unprecedented prosperity. By 1952, however, they faced drastic drop in the

³ Ragner Burkse, Problems of Capital Formation in Underdeveloped Countries, pp. 97-98, and United Nations, Processes and Problems of Industrialization in Underdeveloped Countries, pp. 75-78.

⁴ "Rest and Recuperation" is a military term used to be abbreviated as R&R which is designed for officers and men of U.N. Forces to be air-shipped from Korea to Japan for holidays.

international markets prices of tin and rubber. The price of rubber fell 35 percent between mid-1952 and mid-1954, the price of tin dropped 35 percent in the first half of 1953 alone.⁵ This was a disillusioning experience which drove home the reality of their economic vulnerability. But, on the contrary, India derived no net improvement for her terms of trade during the Korean War because the foreign market for her supplies was unfavorable.

The arguments may be advanced that the increase in a country's exports proceeds cannot be assumed to increase domestic capital formation, because part of all of the proceeds may be used for increasing imported luxury goods or local consumers's goods which are likely to push prices upward. The favorable terms of trade are, therefore, not an automatic source of capital formation. In order to exploit this source of capital and prevent inflation, adequate fiscal policy in the form of taxation or tariffs must be exercised to take the extra proceeds away from consumption. This is a form of compulsory saving which might be invested for desirable industries.

Apart from the problems of terms of trade the balance of payments difficulties is unique with underdeveloped areas. Causes of this unfavorable balance of payments are many.

⁵ John Kerry King, South-East Asia in Perspective, p. 237.

First, underdeveloped regions are usually primary producers and as such are exposed to large fluctuations in their markets and to consequent disequilibrating effects on their balance of payments, because the more remote stages of production from the consumer are more subject to annual and cyclical variations.⁶ Secondly, underdeveloped countries generally have low incomes, and low incomes constitute to the balance of payments difficulties, because the demonstration effect,⁷ may increase consumption expenditures which in turn induce foreign deficits. A universal technological lag in underdeveloped countries tends to cause home consumers to substitute imports for domestic products. It is also because poorer countries usually hold meager reserves as a buffer against variations in export yields. Thirdly, developing economies are usually borrowers. Borrowed funds are very often the source of capital which may cause excessive imports, and the capital utilized locally may cause excessive effective demand. In this case, adequate policy must be employed to prevent inflation and to steer the balance of payments difficulties.

Another problem which may also come from the unfavorable balance of payments is capital outflow. For the purpose

⁶ F. A. Hayek divided the structure of production into stages, the remote the stage from the consumer, the more is it subject to fluctuation. See James Arthur Estey, Business Cycles, Englewood Cliffs, N.J., Prentice-Hall, Inc., 1956, p. 268.

⁷ Demonstration effect was discussed in Section 2, Chapter III.

of preventing the unfavorable balance of payments and capital outflow, exchange control is very often introduced so as to obtain protection from foreign competition, to encourage savings, to obtain favorable terms of trade, to protect from foreign depression. The effectiveness and procedures of adopting foreign exchange manipulation are not considered here, but this type of beggar-thy-neighbor policy could result in declining international trade and retaliation from other countries.

The problems of balance of payments difficulties can also be solved externally by international flow of capital to finance a steady rate of economic development of those underdeveloped countries in the forms of private direct investment, public loans and grants as well as technical assistance.

2. Foreign Private Capital

Foreign private capital includes amounts placed by foreign private investor, whether as loans or equity investment. Reinvestment by foreign-owned or foreign-controlled companies of undistributed earnings is usually a principal source of additions to existing investment. Before World War II, Britain made considerable foreign investment which has largely private and spontaneous international capital flow. After World War II, inter-governmental loans and grants have increased greatly in importance, in many cases they have reduced the need of the receiving countries to raise capital in

foreign markets and in some cases have restricted the possibility of investing private capital abroad. But the international flow of private capital came to a position of secondary importance chiefly because of obstacles on the level of politics and international understanding.

Obstacles to the decline of private foreign investment result partly from inadequate rates of return, but also from the wide differences in profit transference, exchange manipulation, taxation, etc. existing in the view of the investor and the country in which the investment takes place. The reasons in causing this shift are discussed at length by United Nations experts.⁸ Private investment, based upon profit expectations, goes to areas where yields look most attractive and rights of ownership are guaranteed. In general, underdeveloped countries in Latin America derive most of their inflow of foreign private capital from the United States, dependent territories such^{as} countries in South Africa and Borneo and Hongkong in Asia from their respective metropolitan countries in Western Europe. Relatively little private capital flows to the independent countries in South-East Asia. To this point of declining private investment in those newly independent underdeveloped countries, Professor Kindleberger⁹

⁸ United Nations, The International Flow of Private Capital, 1946-1952, Chapter I-II.

⁹ Charles P. Kindleberger, International Economics, Homewood, Illinois, Richard D. Irwin, Inc., 1953, p. 356.

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gives partial answer to the decline in investment from those metropolitan countries in Western Europe. In nineteenth century of a world of political dependency, mining concessions, for example, were usually rather one-sided affairs. "Concessions were signed with a navy gunboat anchored off the underdeveloped country's capital". When the underdeveloped areas become independent or strong enough to protect their own rights, "this sort of dealing is no longer practiced".

There are numerous deterrents to increased foreign private investment in underdeveloped countries. The tendency towards planned economies and nationalization may operate against private capital. Private capital is also not attracted by the type of basic economic needs such as transportation, irrigation, power, communications and public utilities, which are vital to the economic growth of backward economies.

According to United Nations estimate of the period of 1946 to 1952¹⁰ there was a net outflow of private long-term capital from the industrialized countries known as capital exportation of some \$11 billion (or an average of \$1.5 billion annually). The great bulk of the capital coming from the United States was absorbed by economically developed countries, such as Canada and Australia. A great portion of the part left went to underdeveloped countries, however, the petroleum industry accounts for a lion's share of it. There was

¹⁰ United Nations, The International Flow of Private Capital, 1946-1952, p. 3.

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hardly any left for other purposes. Most of the foreign investment in manufacturing industries has been made, not in underdeveloped, but in economically advanced countries. However, private foreign investment in public utilities have been more than offset by the liquidation of such investments. Of the extractive industries and public utilities, the United Kingdom made considerable investment in these field before World War I. Now very few countries permit foreign capital to go into these industries. This is also an explanation for the decline of private capital foreign capital, since outlets for investment have been narrowed.

There is no way of circumventing the fact that private investors and banks are interested in secure and profitable use of their capital. It is conceivable for the governments of underdeveloped countries to make an intensified effort to muster and employ available domestic capital. Foreign investors are not likely to venture capital where domestic investors fear to do so as profit looks unattractive or political security is absent. It is also possible for the underdeveloped governments to attempt to eliminate hostility and discrimination against private foreign capital by strengthening the legal status of foreign capital, giving assurances against expropriation or default of loans, and reducing restrictions against business enterprise and releasing exchange control. Nevertheless, they also very much fear and want a

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complete change in Western attitudes with respect to colonialism and imperialism.¹¹

3. Foreign Public Capital

Apart from the general insufficiency of private funds, there are other specific reasons for assigning to public sources of foreign capital a crucial role. Since the Second World War the United States government took lead in making tremendous loans and grants to other countries for both their economic improvement and military build-up as well. An actual expenditure on foreign aid by the United States have run at a remarkable consistent rate of over \$4 billion a year ever since 1947.¹² What reasons prompted the American Government to embark on such a gigantic and costly enterprise? The answer lies partly in the fact that the progressive reduction of certain domestic mineral resources in the United States caused Americans to invest in foreign countries so as to get the raw materials they wanted. Behind the political scene, there is actually a strong desire to strengthen their own defenses within the framework of a collective security system. American foreign aid became a fixed "part of a national insurance policy" to use Secretary Dulles' words, "which we take

¹¹ The eclipse of Western imperialism and the rise of modern Communist imperialism is clearly illustrated by R.A. MacKay & S.A. Saunders in The Modern World (The Ryerson Press-Toronto, 1951), pp. 367-390.

¹² The Economist, March 1, 1956, Foreign Aid in a New Context, p. 119.

out against a serious and evident threat from the Soviet Communists"¹³. The attainment of "sound economic conditions and stable international economic relations" is at the core of American economic and technical aid.¹⁴

Before the end of World War II the United States took the initiative in developing such international organizations as UNRRA (United Nations Relief and Rehabilitation Administration), the International Bank for Reconstruction and Development, and the International Monetary Fund. The 9.5 billions which went into these efforts represented 75, 38 and 35 percent respectively of the quotas of these organizations¹⁵. Since the end of Second World War the United States have expended from mid-1945 to mid-1956 nearly \$57 billion in grants and loans in support of foreign aid program.¹⁶ Of the \$57 billion of U. S. foreign aid in the past 11 years \$39 billion was spent for economic assistance and \$18 billion for military aid. Europe received two-thirds or about \$26 billion of the total spent for economical aid mainly under the Marshall Plan. A further \$2.4 billion went to another industrialized area -- Japan. The remaining \$10.6 billion -- less than one fifth of

¹³ Clarence C. Walton, A Basic Review of Our Foreign Aid Program, Review of Social Economy, Sept. 1957, Vol. XV, pp. 118-137.

¹⁴ John Perry King, South-East Asia in Perspective, p. 218.

¹⁵ Clarence C. Walton, A Basic Review of Our Foreign Aid Program, p. 119.

¹⁶ Economic Development Assistance, Committee for Economic Development, April, 1957, p. 16.

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the total aid --went entirely to underdeveloped countries.¹⁷ Under a theory "Europe First", the direction of the larger part of the United States post-war foreign aid went to Europe and the relatively small sum shown in the following table have been made available to real economic investment in underdeveloped areas.

In addition to the figures of Table VI, for the fiscal year of 1957, the United States foreign appropriations were \$2,018 million for direct military aid, \$1.162 million for defense support and \$625 million for economic development, technical aid and all other foreign assistance.¹⁸

Out of the total United States government foreign aid only about less than one tenth had been extended in the form of loans by the Export-Import Bank. This fact is explained primarily by the large amount of outright grants of loans made directly by Congress.

Despite their small share in the total of United States foreign aid, Export-Import Bank loans to underdeveloped areas were more than double those of the International Bank during the period from mid-1945 to March 31, 1953; the former

17 Op. cit., p. 16.

18 International Stability and Progress, The American Assembly, Graduate School of Business, Columbia University, p. 73.

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TABLE VI

DISTRIBUTION OF UNITED STATES GOVERNMENT
FOREIGN GRANTS & CREDITS
(in \$ millions)

	Post-war Period	Before Korean Invasion	After Korean Invasion	(July 1, 1955- June 30, 1956)
Total	56919	26347	30571	5051
Military	17809	1438	16371	3044
Non-military	39108	24909	14199	2077
Europe	26115	18996	7119	441
Japan	2588	1973	615	-11(a)
Canada	- 10(a)	1	-11(a)	-12(a)
Main Defense				
Support Countries	6273	2657	3616	897
China: Taiwan	1321	819	502	113
Greece	1362	776	586	66
Indo-China	563	...	563	256
Korea	1483	367	1116	254
Pakistan	258	...	258	123
Philippines	846	620	226	26
Turkey	440	75	365	59
All others	4140	1281	2857	669
India	444	12	432	101
Other Near East				
S.E. Asia	1137	- 3(a)	1140	164
Other Far East	372	184	187	145
American Republics	1154	356	798	188
International and unspecified	1033	732	300	71

Source: International Stability and Progress (The American Assembly, Graduate School of Business, Columbia University, New York, N.Y., June, 1957), p. 62.

(a) Net repayments.

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TABLE VII
 NET CREDITS AUTHORIZED BY THE EXPORT-IMPORT BANK
 July 1, 1945-June 30, 1953
 (\$ million)

Area	Net au'ed	Develop't	Recst'n	Lend- lease	Cotton Purchase	Others
Total, all areas	4,439.7	1,704.1	1,007.7	655.0	402.8	670.1
Europe	2,410.8	314.6	971.8	655.0	229.6	239.8
Latin America	1,201.3	754.6	.....	.....	20.0	426.7
Asia & Africa	668.5	478.4	35.9	.....	153.2	1.0
Canada	150.7	150.7	.....	.....	.....	.....
Miscellaneous	8.4	5.8	.....	.....	.....	2.6

Source: National Advisory Council on International Monetary and Fiscal Problems, Semi-annual Report to the President and to the Congress, March 1, 1953.

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were \$4,439.7 million and the latter were only \$1,557 million.¹⁹

The primary purpose of the Export-Import Bank is to encourage American exports. It is usually required that its loans be used for purchasing American products. As shown in Table VII, more than one half of the total sum went to Europe and relatively a small share was made to underdeveloped countries.

The International Bank for Reconstruction and Development has made a special contribution to undeveloped countries by requiring loan applicants to present sound development projects and by its policy of providing financial and economic experts to assist and advise governments of underdeveloped areas. As shown in Table VIII, almost two-thirds of the grand total of loans made by the International Bank went to underdeveloped countries including Africa, Asia, Austral-Asia and the Western Hemisphere. Development loans for electric development and transportation constitute a major part of the total loans.

The limitations of the Export-Import Bank and the IBRD as sources of development capital for underdeveloped countries stem both from their limited capital and from their generally conservative outlook. Both consider risk factors

¹⁹ Buchanan & Ellis, Approaches to Economic Development, p. 368.

TABLE VIII

LOANS CLASSIFIED BY PURPOSE AND AREA FROM INTERNATIONAL BANK
FOR RECONSTRUCTION AND DEVELOPMENT, June 30, 1957
(\$ million)

Purpose	Total	Area Africa	Asia	Austral- Asia	Europe	Western Hemisphere
Grand total	3,025	267	575	317	1,088	678
Development loans: total	2,528	367	575	317	591	678
Electric power	869	178	145	29	186	331
Transportation	715	145	137	127	59	247
Communications	24	2	...	...	...	22
Agriculture & Forestry	276	...	46	104	71	55
Industry	439	2	172	57	185	23
General Development	205	40	75	...	90	...
Reconstruction loans: total	497	...	...	...	497	...

Source: International Bank for Reconstruction and Development,
Twelfth Annual Report, Sept. 24, 1957.

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and extend loans on a basis of conventional banking practice. A special important need or a soundly conceived development project justifies a loan only if prospects for repayment of principle and interest on schedule appear certain.

There are also United Nations programs and organizations with resources to assist the economic development of underdeveloped countries. The expanded program of Technical Assistance financing of students and fellows from underdeveloped countries to more advanced countries is an example. Its budget has been between \$25 million and \$30 million in 1957.²⁰ The newly established International Finance Corporation helps private capital flow into enterprises in underdeveloped countries. Technical as well as financial aids to underdeveloped countries were also provided by Commonwealth countries,²¹ participating in the Colombo Plan and by the metropolitan governments to their colonies. Besides, USSR, Red China, Czechoslovakia also made loans to India, Egypt, Afghanistan and North Korea, etc. A figure of \$1,900 million for total Communist aid was made to uncommitted nations since 1955 up

²⁰ Department of External Affairs, Canada, Canada and the United Nations, 1956-1957, p. 46.

²¹ Colombo Plan was established in January 1950, but member countries are not limited to Commonwealth countries, they are: Australia, Burma, Cambodia, Canada, Ceylon, India, Indonesia, Japan, Laos, Nepal, New Zealand, Pakistan, the Philippines, Thailand, the United Kingdom with its dependent territories, the United States and Viet-Nam. See Depart. of External Affairs, Canada, The Colombo Conference, Jan. 1955, Vol. 7, No. 1.

to the end of 1957²². Russia and her allies have also offered help to Burma, Indonesia, Ceylon, Pakistan, Thailand, Cambodia, Syria, Lebanon, Iran, Liberia, Ethiopia and the Sudan.²³ In the year of 1955, Russia and her allies concluded 29 new trade agreements with non-Communist countries, 23 of them in the underdeveloped world.²⁴

The problem of public foreign capital made available directly to underdeveloped countries induced serious discussions among economists as well as politicians. In order to avoid the economic rivalry of the powers in those areas²⁵ a philosophy of joint aid program through the United Nations was introduced for several years. The proposed Special United Nations Fund for Economic Development (Sunfed) was subject to a detailed study by a Committee of nine experts appointed in 1952 and by another group headed by Mr. Slheyven of Belgium appointed in 1954.²⁶ The less developed countries,

²² This figure was given by the State Department of United States Government. See "Escape from the Aid Maze", The Economist, March 1, 1958, p. 731.

²³ Economic Development Assistance, Committee for Economic Development, April, 1957, p. 11.

²⁴ Op. cit., p. 12.

²⁵ "Escape from the Aid Maze", The Economist, March 1, 1958, p. 731.

²⁶ See Department of External Affairs, Canada, Canada and the United Nations, 1956-57, p. 47; also see United Nations, Report on Special United Nations Fund for Economic Development, 1953.

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especially those "uncommitted" ones, have strongly favored the establishment of Sunfed, but its establishment was suspended because of lack of enthusiasm of those advanced countries.

CHAPTER IV

HUMAN RESOURCES AND CAPITAL FORMATION

From the point of view of both economic development in general and capital formation in particular, the relationship of the size of population to real national income may differ very much among communities and nations. In this chapter consideration will be given first to the general population problem in underdeveloped countries; secondly, to the so-called "disguised" unemployment or underdevelopment in the rural areas by which the capital formation is seriously affected; and finally, the importance of a social class of entrepreneurs and capitalists which usually contributes most to capital formation.

1. The Population Pressures on Capital Formation

Economic disadvantages are generally faced by economies of both underpopulation and over-population; the latter is more serious than the former. An under-populated country would be unable to take advantage of the economies of large-scale production. Industries of public utilities cannot be well developed by a small number of people, specialization of production would be difficult and market for products also limited. On the contrary, the dangers of fast growing-

population pressures spring from the fact that the increase in population involves an increase of the wants which have to be satisfied; the extra workers have to be fed and clothed and housed, so that the capacity of capital formation is reduced because the average income falls too low to bear a saving.

Then, what should be an optimum population of a country so far as economic development is concerned? Perhaps this question seldom results in an agreeable answer. Many of the countries that have experienced a fairly rapid rate of industrial expansion in recent years -- Australia, Canada, Union of South Africa, for example, have been those in which population growth has contributed to a better use of natural resources. On the other hand, in many of the countries, like China, India and Japan, the problem of rapid growth of populations formulates a big obstacle to their economic betterment.

Given the state of technology and other factors, an optimum population would be one that maximizes per capita output. So long as there are increasing returns to scale in the economy, population may be less than optimum. But, after a point, as population increases, the rate of increase of output per head slows down according to the law of diminishing returns, population would exceed its optimum size. For when the supply of factors and technology are changing over time,

the concept of an optimum population becomes elusive in a dynamic economy.

An economy would, however, benefit only when its population growth is accompanied by a more than proportionate increase in output so as that the per capita level of income could be improved. In this respect, United Nations experts¹ made a very clear illustration in showing that a "population increase of one percent a year requires an annual gross investment of the order of 4 or 5 percent of the national income merely to provide the increased population with a constant per capita endowment of capital assets. With a population growth of 2 percent a year -- the basic pre-expansion investment would be about 8 to 10 percent of the national income. With a population growth of 3 percent a year -- a rate approximated in Ceylon, Mexico... the required investment would be as high as 12 to 15 percent of the national income..." But statistical materials show² that very few underdeveloped countries have a capital formation as high as 12 to 15 percent of their national income, thus the difficulty of increasing the rate of capital growth as well as economic development is obvious to them.

What are the major factors affecting the growth of a

¹ United Nations, Processes and Problems of Industrialization in Underdeveloped Countries, 1955, p. 15.

² United Nations, Determinants and Consequences of Population Trends, 1953, p. 21.

population? It is agreed that the rate of growth of population in any country is a direct function of three elements: changes in the birth rate, changes in the death rate, and changes in the volume of migration (immigration into, and emigration out of, the country). The birth rate is measured in terms of the number of children born for every 1,000 women in the various groups of the population. It depends in turn on how many women marry, on the age at which they marry and on the number of children they have. The death rate is the number per 1,000 of the population who die each year in the various age groups. Medical improvement and sanitation will have much influence on the mortality rate. The net immigration changes may be influenced by comparative levels of economic activity between the country in question and the rest of the world. It is also affected by political events, by the risks of war, and by the migration policies of the governments concerned.

It is estimated that two thirds of the world's people live in the underdeveloped areas and the population of these areas have increased substantially during the past century. The population of India in 1850 was less than 190 million;³ in 1950 this area including Pakistan, held more than 400 million

³ Norman S. Buchanan & Howard S. Ellis, Approaches to Economic Development, p. 92.

people. The fast growing population in South-Asia may be exemplified by another case of the population of Taiwan.⁴ The Government gave for 1954 a crude birth rate of 43.84 per thousand and a crude death rate of 8.02 per thousand, or a rate of natural increase of 35.82 per thousand. United Nations experts attribute this type of high rate of natural increase to the persistence of the family system with two or three generations living together and the prevalence of the rice economy requiring large manpower during seasons of peak activity. It seems, however, that the last remarks are debatable because rice crops are three times a year in Taiwan and farmers are busy all year around since there is no winter in that island. It is hard to distinguish the seasons of peak activity.

Of the problem of specially high rate of natural population increase in underdeveloped countries like India and Pakistan, Bauer and Yamey expressed quite a different view.⁵ They insisted that the most densely populated countries are not necessary those with the most rapid rate of population growth; the rate of population growth in India and Pakistan since 1800 has not been very different from that in several countries in Western Europe in the same period. The present rate of population growth in India and Pakistan is not

⁴ United Nations, Economic Survey of Asia and the Far East, 1955, Section of China: Taiwan.

⁵ P. T. Bauer and B. S. Yamey, The Economics of Underdeveloped Countries, p. 59.

significantly greater than that in the United States and Canada. The point of contrast is that in the Far East and in South Asia there is a heavy reliance on a comparatively backward agriculture, so that large areas are over-populated in a sense in which the West is not. Statistical figures of birth and death rates of selected countries are given in Table IX:

The United Nations statistics indicate that the natural population growth in India is lower than that of Canada, but a little higher than that of the United States. If the total population growth (net natural growth plus immigration) is taken, the Indian population growth must be much lower than that of the North America. And again, if a comparison is made between the population growth of North America and those densely populated areas over the same period, the fact is that the population growth in North American Continent is much faster than all other countries. For example, in 1900, American population was only 76 million⁶ which is much less than one half of its present population. Probably no country in other continents doubled its population in only 50 years. That is why Arthur R. Burns also stated that in China the population has probably been stationary for the past century. The population of Africa and South America, as shown in Table 10,

⁶ This figure is given by Bloom and Northrup, Economics of Labor Relations, Homewood, Illinois, Richard D. Irwin, Inc., 1955, p. 7.

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TABLE IX
 CRUDE BIRTH AND DEATH RATES IN
 SELECTED COUNTRIES, 1955

	Birth Rate (Per 1000 population)	Death Rate	Natural Rate of Growth
<u>Rich Countries</u>			
Canada	28.3	8.1	20.2
France	18.4	12.0	6.4
United Kingdom	15.4	11.7	3.4
United States	24.6	9.3	15.3
<u>Poor Countries</u>			
Ceylon	37.9	11.0	26.0
Chile	35.0	12.0	23.0
Guatemala	51.0	18.5	32.5
India	30.9	12.7	18.2
Taiwan :China	43.84	8.02	35.82

Source: United Nations, Monthly Bulletin of
 Statistics, X, No. 7, July 1956, 6-10.

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TABLE X
 WORLD POPULATION, 1650 to 1950
 (Millions)

Continent	1650	1750	1850	1900	1950
Europe	100	140	266	401	557
N. America	1	1	26	81	190
C & S America	12	11	33	63	137
Oceania	2	2	2	6	13
Africa	100	95	95	120	198
Asia	330	479	749	937	1,305
World Total	545	728	1,171	1,608	2,400

Source: A. R. Burns, Comparative Economic Organization, p. 321, quoted from Foreign Agriculture, Feb., 1953.

were stationary or declining over long period before the 19th century.

Nevertheless, the serious population pressures which appear in those underdeveloped countries are evident, chiefly because their populations have already surpassed the optimum limit and their cultivated land and capital are short. They are poor because their per capita income is very low in comparison with richer countries.

Recent records show that there has been an apparent decline in mortality rates in underdeveloped countries, especially among infants, because new public health techniques of disease control have been introduced.⁷ The rate of natural growth is likely to be intensified by the widening gap between the birth and death rate. In those underdeveloped countries land resources are meagre in relation to population, the increasing populations are likely to impede the process of industrialization. According to the law of diminishing returns, the result of per capita production on the same extent of land tends to decline. However, a big population has the advantage of specialization in manufacturing industries and a large market for expansion of public utilities. But a low average income with a relatively higher demand for consumption goods

⁷ United Nations, Statistical Year Books, 1953, 1954, and Population and Vital Statistics Reports, October, 1955.

will result in a smaller margin of savings being available for capital goods. Thus, the increasing population turns out to be an unfavorable effect on the rate of capital formation in underdeveloped countries.

Rapid population growth in low-income countries impedes industrialization not only by reducing the volume of capital available but because unless income rises more rapidly the demand pattern in such a situation is likely to present little inducement to entrepreneurs of other products. Hence in the absence of a substantial increase in agricultural productivity, high birth rate and rapid population increase are likely to remain a handicap to the capital formation in heavily populated countries. However, some of them have taken necessary steps to counteract the problem.⁸

2. Unemployment and Underemployment

Human resources are clearly a most valuable and the most versatile resource to a country. No matter how high a country is endowed with capital per capita, its full development is impeded without a considerable population. On the other hand, no matter how big a population a country has, it cannot afford to have a large volume of unemployment and underemployment in any form. Human resources are characterized

⁸ Birth control and other measures are conducted in Japan, see Robert H. Amundson, Japan's population problem: A positive approach; Review of Social Economy, XV, Sept., 1957, pp. 104-117.

by a nature of perishability. With most natural resources, stocking or conservation as a source of capital formation is not difficult. The lumber that is not used today will be available for use at any time in the near future. So are the oil, coal, etc. But human resources must be utilized day by day as they become available. Each hour of human service that is lost is irretrievably gone. Unemployment and underemployment are a form of economic waste which is running the opposite way with capital formation. A running water faucet, steam escaping from a locomotive or heating system, a street light left on in daytime-- all immediately attract people's attention and comment,⁹ but an unemployed man is taken for granted, especially in the form of so-called "disguised" unemployment in the rural areas, which is a very common phenomenon in most of the underdeveloped countries. And more than this, those unemployed men cannot consume less than those who are working. A considerable portion of savings from those working people must be consumed by those idlers. The difficulty for capital formation and investment is evident.

In underdeveloped countries many people are unemployed or underemployed not because they prefer idleness to work, but because there is an insufficiency of complementary factors of production. The factor in insufficient supply may be

⁹ Thanks to Prof. Dale Yoder's Manpower Economics and Labor Relations, New York, McGraw-Hill Book Co., Inc., 1950, part of this idea is obtained from his eloquent arguments in that book, Chapter I.

either land, capital, technical, administrative or entrepreneurial skills, or a combination of all or some of these. Farmers and their families have too little land or insufficient equipment at their disposal to keep them fully occupied, while at the same time there are obvious obstacles in the way of their securing employment outside agriculture.

The degree of this disproportion between the population and the complementary production factors of land and capital equipment differs, of course, among various underdeveloped countries. For our purpose, two groups are worth distinguishing: First, those underdeveloped areas in which the marginal physical product of labor is still greater than zero, so that if labor were withdrawn from agriculture total farm output would decline; second, those others in which the marginal physical product of labor has already fallen to zero, so that some labor could be withdrawn without reducing total output. Most countries in Latin America and Africa fall in the first groups, while the South-East Asian and some Arab countries belong the second one.¹⁰

There is perhaps little or no evidence to show that South America has much disguised unemployment in the sense that large masses of human resources could be drawn away from agriculture without affecting the volume of output there.

¹⁰ United Nations, Measures for the Economic Development of Underdeveloped Countries, pp. 9-10.

There may be disguised unemployment in a different sense. There may be some occupations with little capital that are relatively unproductive, while other capital-intensive ones are relatively productive. Agriculture may be inherently less productive than industry. A transfer of labor from the former to the latter would increase total output and so the people in the relatively unproductive sectors might be considered unemployed.

The chief reason causing labor relatively productive in one sector and relatively unproductive in another is probably the disproportion of capital equipment used. The American economy has the highest productivity in the present world because American capital-intensive proportion is also the highest. An increase in agricultural productivity in those underdeveloped countries must be accompanied by a priority of capital utilization in it, because the great majority of the population, even in underpopulated areas like South America, is in agriculture. It is argued that since food absorbs the greater part of a poor people's income and since agriculture absorbs the bulk of their labor force, a given percentage increase in agricultural productivity will release more for capital formation than that in other fields. In underpopulated areas, capital improvement required in agriculture will be small and will easily result in a higher productivity.

As for the problem of rural overpopulation, South-East Asia and the Far East are perhaps the best examples. There is tremendous waste of human resources in those countries. What this implies in regard to capital formation is deeply related to the fact of crude disguised unemployment.

In most countries of South-East Asia and the Far East, the same farm output could be obtained with a smaller labor force in their agricultural sectors. The term "disguised unemployment" implies a condition of family employment in peasant communities. A number of people are contributing virtually nothing to output but living on a share of their family's real income. A United Nations report states that for many regions of India and Pakistan, parts of the Philippines and Indonesia the surplus agricultural population is between 20 percent and 25 percent.¹¹ And Ragnar Nurkse¹² also gives a rough estimate, namely, that 15 percent, 20 percent or as much as 30 percent constitutes disguised unemployment in countries of South-East Asia. The specific feature of rural unemployment is that you cannot distinguish from each other those who are employed and those who are unemployed, because everybody is busy at the seasonal agricultural peak and probably most of the villagers are idle during off seasons. The

¹¹ United Nations, Measures for Economic Development of Underdeveloped Countries, 1951, p. 9.

¹² Ragnar Nurkse, Problems of Capital Formation in Underdeveloped Countries, Chapter II.

only thing is that a potential number of people can be taken off the land without reducing the total output. This type of unemployment differs from open industrial unemployment in that it cannot be absorbed by means of an expansion of monetary demand. When monetary expansion occurs, the result is merely an inflation because of the inelasticity of agricultural production.

In a sense, underemployment in rural areas denotes not only labor force but also capital equipment. Carts, cattle, hoes, shovels, and so on, could be more productively employed if plots were not so small and widely scattered and if farms could be more consolidated than they are. There is a phenomenon that farmers who have a large number of dependents usually cannot afford to feed a necessary number of cattle because they want to save sufficient food for men rather than for the consumption of animals. That is why all dogs were killed as soon as the "economical" Communists took over the China Mainland, because dogs were considered as one of the big sources of waste.

The ways to escape from the disguised unemployment in the overpopulated underdeveloped areas are basically three. First, technical improvement will bring about a considerable increasing amount of output by which their per capita income would be improved. It is believed that the Chinese agricultural productive methods, for example, were little changed during the past two thousand years. Agricultural products

were only increased by increasing farming areas. These better techniques need to be imported from those advanced countries. President Truman's Point Four of technical assistance programs are essentially of this nature. Secondly, a shift of the structure of production in favor of those industries using relatively more labor in countries where labor is abundant. It is the only way to reduce the rural surplus by expanding non-agricultural employments. But not many of those underdeveloped countries have succeeded in industrializing rapidly enough to reduce their agricultural populations. However, Japan was the one which succeeded by going through free enterprise system whereas USSR was the another which obtained rapid industrialization by going through a totalitarian way. Generally all those countries which are overpopulated relatively to their agricultural resources must manage to look for export markets for their manufacturing products in exchange for food and raw materials for their own needs. It is but often argued that such a type of economy is not the safest. A highly foreign dependent economy is in a hazardous position in case international trade restrictions are increased or risks of war exist. And finally, improvements in the relationships among the productive factors, through increasing the quantities of the relatively scarce land and capital factors or reducing the superabundance of the labor force,¹³ may lessen

¹³ Of this point, Buchanan & Ellis gave a very clear idea in their book "Approaches to Economic Development", pp.44-48

disguised unemployment. Internal and external migration as well as birth control may reduce the labor supply on the one hand; expansion of new land, improvement of seeds, irrigation, fertilizer, and so on, and importation of capital goods by means of foreign trade or foreign aid may change the proportion of the factors of production. Thus the problem of unemployment and underemployment in backward countries could be partly cured. And the opportunities for capital formation and investment must be improved accordingly.

3. Entrepreneurship and Technology

The rapid industrialization of modern economies is often attributed to the appearance of a class of businessmen, commonly called entrepreneurs. Americans are often especially proud of saying that quite a number of great entrepreneurs have arisen in America, such as Frederick W. Taylor and Frank B. Gilbreth and his wife, Lillian M. Gilbreth¹⁴ who introduced what they called scientific management to the modern business. Henry Ford and Frank W. Woolworth are also famed as innovators born¹⁵ with the knowledge of innovation and also willing to bear the risks. Professor John H. Sheeman, of the University of Notre Dame, defined entrepreneurship as the basic decision-making regarding the combination and use

¹⁴ Richard N. Owen, Management of Industrial Enterprises, Chapter I.

¹⁵ W. Arthur Lewis argued that the great entrepreneurs are born, not made. See his book The Theory of Economic Growth, p. 196.

of human labor, natural resources and capital instruments, for producing goods and services that men need and want for living.¹⁶ In ~~the~~ contrast, Professor Schumpeter restricts the term entrepreneur to the innovator in his early work and admitted later that entrepreneur was representative of all those activities that run in terms of invention, innovation and technological changes.¹⁷

An acceptable concept of the entrepreneur must not neglect the specific feature of non-insurable risk, and knowledge of prices and costs and the ability and desire to use this knowledge. Entrepreneurs improve the productivity of given resources. Innovation and the exercise of entrepreneurship in the sense of creating or taking advantage of unsuspected opportunities for profitable economic activity are often more dramatic in their impact. The economy is fortunate when there are a considerable number of individual entrepreneurs who are resourceful, thrifty and industrious have technical or administrative skills and are willing to take a long view.

In many economically backward countries there are difficulties in the way of developing and using the entrepreneurial

¹⁶ John H. Sheeman, What is the Function of the Entrepreneur? Review of Social Economy, March 1950, p. 30.

¹⁷ Joseph Schumpeter, The Theory of Economic Development, 1934, Business Cycles, 1939. The term entrepreneur denotes differently in these two books.

qualities. The force of custom, the rigidity of status, and the distrust of new ideas, combine to create an atmosphere inimical to experiment and innovation. The system of family, the village, the clan or the tribe also inhibits innovations because the rewards have to be shared widely. The innovator disrupts the established order of things in promoting new activities and is therefore often an object of suspicion. The low level of capital also hampers innovation. Most important of all people in underdeveloped countries must give up their traditional way of thinking and accept a new philosophy of change. A recent British visitor summarized his impressions of American business in one word--dynamic. He said, "The dynamic nature is nowhere more clearly illustrated than in your obsolescence policy. This, it seems to me, is not merely a policy but also a philosophy. This is a driving force in your system which makes it imperative that the 1947 model--whether it be an automobile, a radio, a razor, or a fountain pen--shall immediately render the 1946 version out-of-date".¹⁸ From this illustration we can say that it is the entrepreneur who contributes most to the dynamic nature of innovation which in turn encourages saving and investment most. Underdeveloped countries are often short of this type of entrepreneurship.

¹⁸ Malcolm P. McNair & Harry L. Hansen, Problems in Marketing, New York, McGraw-Hill Book Co., Inc., 1949, p. 3.

Some of this knowledge can be learned from school or imitated from advanced industrial countries. Japanese are reputed by their fast imitation from the Western World in innovation as well as in scientific inventions. As soon as a new type of goods or invention appeared in the United States or Germany, similar products would immediately appear on Japanese markets which may be more cheap and smart than the original, such as lighters, electric razors or even commercial and naval ships. But it is argued that an important part of this knowledge can be learned only by experience of the job. Because you may learn the tricks of keeping records, handling of machines, designing layout of plants from business schools but you cannot learn how to get on with your staff or in maintaining the integrity. That is why many backward or colonial countries take steps to compel foreign firms to open up managerial positions to local people.

In underdeveloped countries a massive scale of innovation in firms or industries seems impossible, and local entrepreneurship can only begin in a small way because technical and administrative skills as well as capital are at a low level. Transition from a subsistence to a market economy involves many small changes which may involve introduction of new crops to an area, cultivation of new land, development of trading connections and routes, adoption of new equipment and improvement in transportation. All of these require those individuals adapting new ideas to take risks with or

without government assistance.

It is a fact generally acknowledged that apart from cases where farmers are forced to provide for capital formation, the main source of savings in any economy is profits, distributed or undistributed. Entrepreneurs are the most thrifty, economical and profit-making people. The profit-maker knows that the most profitable investments are those which exploit new techniques or open up new resources. They not only have the ingenuity and administrative abilities, but also a peculiar talent for seeing how productive resources may be used in unfamiliar ways to produce a better result. They form up a dynamic factor of particular importance for material progress year after year. Therefore, entrepreneurship and technical innovations are the main driving forces causing an economy moving upward cumulatively. In the absence of them capital formation in any free enterprise economy must be slowed down.

The importance of foreign entrepreneurship in some of underdeveloped countries was discussed by Bauer and Yamey.¹⁹ Economic developments in these countries were accelerated by foreign entrepreneurs because they have been mostly responsible for bringing many of these countries closely in contact with the network of international commerce. They introduced some

¹⁹ P. T. Bauer & B. S. Yamey, The Economics of Underdeveloped Countries, Chapter VIII.

fruits of modern organization, capital, science and technology. The work of the British in India and Pakistan, of Dutch in Indonesia, of Chinese in South-East Asia and in West Indies, of Indians in Africa, and of Arabs in East Africa has done much to promote their economic growth generally. They have accumulated capital, provided skills and aptitudes and have pioneered in the development of trade, transport and industries.

The Chinese immigrants and settlers in South-East Asia have been numerous. According to recent estimates,²⁰ the total number of Chinese in South-East Asia (excluding in China Mainland and Taiwan) amounts to 13,374,716 in 1955. They constitute roughly one-fourth of total population of Thailand, more than one-third in Malaya and Singapore, 99 per cent of Hongkong and Macao, and 10 to 20 percent of the Philippines, Vietnam and Indonesia. Their contribution to economic development has been striking and they play a prominent part in economic life in those areas. Bauer and Yamey attributed their economic superiority over the indigenous people as due to their greater industry, ingenuity, thrift, ambition and resourcefulness. It is a rather interesting question that Chinese are not so successful in their homeland as they do in the above-mentioned areas. Their accumulation of

²⁰ China Handbook 1955-1956, Published in Taipei, Taiwan, Chapter XXI.

wealth in Malaya, for example, is more obvious than that of Jews in the Continent of America. Perhaps the similar results are made by those other foreign entrepreneurs in many of those underdeveloped countries.

The reason why the foreign entrepreneurs are economically successful in those backward countries is primarily because they have a longer commercial tradition than the native people. They, as immigrants, tend to stick together, and to help each other, and thus promote the prosperity of the group as a whole. And most of all, they possess technical knowledge or aptitude, perception of economic opportunity, administrative skill, industry, frugality or endurance.

Even though the local capital formation is accelerated by the foreign entrepreneurs, indigenous people are trained by their experience on the jobs in those business organizations, yet questions are raised in those underdeveloped areas. It is felt that the growth of the native small business class is menaced by the competition of immigrants in similar trade. In the Philippines a special Act was passed to regulate foreign business, in Vietnam all Chinese were forced to change their names to be naturalized, and in Indonesia most Dutch business firms are nationalized and Dutch people repatriated. British capital invested in Suez Canal was also nationalized by Egypt. It seems that most of the underdeveloped countries consider economic development as their own responsibility and under their own management.

It is worth mentioning here a rather unusual type of entrepreneurship in India known as the managing agency system. According to Andrew F. Brimmer, the managing agency system is a type of industrial organization unique to India in which the promotion, finance and administration of one or more independent companies are controlled by a single firm. The businessmen through the managing agency are the real entrepreneurs in India. They have been the ones primarily responsible for the introduction of new products, new methods of production and new sources of raw materials. They have discovered and exploited new markets and have usually undertaken whatever reorganization Indian industry has experienced.²¹

It is concluded that the factors of entrepreneurship and technical improvements are indispensable to any economy in its capital formation as well as economic development. Importation of foreign skills in the form of technical assistance or foreign investors may play a dominant role. However, underdeveloped countries are anxious to take up this responsibility by themselves, because of securing desirable prestige and because they fear foreign encroachment upon their own economies.

²¹ Andrew F. Brimmer, The Setting of Entrepreneurship in India, The Quarterly Journal of Economics, LXIX, Nov. 1955, pp. 553-576.

CHAPTER V

NATURAL RESOURCES AND CAPITAL FORMATION

1. The Relation of Natural Resources
to Capital Formation

That a country is rich or poor depends much upon the range, quality and availability of its natural resources. Land, regarded as an economic resource, constitutes the basis of the people's livelihood and prosperity. It sets certain limits on people's occupations, through location, size, topography, soil, vegetation and prevailing climates, but offers in return untold opportunities through the same factors. As resource endowment depends in part on the size of the country, it is a major consideration distinguishing the course of industrialization in small countries from that in large ones. In many of the smaller underdeveloped countries, lack of natural resources is likely to be an effective barrier to intensive industrialization. In some--Jordan, Libya, for example--lack of water is likely to be decisive obstacle. In others--Gambia, Jamaica and Caribbean Islands, for example--lack of fuel is more significant.¹ Economic development is unlikely in North Canada, the polar regions of Russia, the deserts of

¹ United Nations, Processes and Problems of Industrialization in Underdeveloped Countries, 1955, p. 43.

South Africa or the North West of China, because of the very unfavorable natural conditions impede their growth.

The value of an economic resource depends upon the terms on which the requisite complementary factors of production are available and on the strength of the market demand for its products. The value of a resource does not depend upon its physical qualities or technical efficiency alone. A complex nature of present and future market influences form part of the environment in which value is conferred in resources. Dr. Sun Yat-sen, father of the Republic of China, gave a very illustrative example of the formation of the value of land in his "The Principle of Livelihood".² He said that there was a place in Australia, for instance, where land was very cheap before the building up of a trade center. A drunken fellow acquired a piece of land from a government auctioneer with \$300 of which he was bitterly regretful after he became awakened. Decades latter the land was worth tens of millions, the old drunkard who did not a bit to improve the land became the wealthiest man in Australia. In his opinion these millions should belong to the public because the people in the community chose this section as an industrial and commercial center and made improvements upon its environments.

² Sun Yat-sen set up two methods in the solution of the problem of social inequality--the first is equalization of land ownership, and the second is regulation of capital. See his The Principle of Livelihood, Lecture Two, published in 1924.

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For our purpose here, we do not care much who should get the benefit, but we come to know that the value of one resource is dependent on the value of other resources. The distinction between natural resources and capital formation is generally blurred, since human skills and efforts as well as capital are commonly used to improve or increase the economic productivity of natural resources such as city land, farm land and rivers. The value of mining production in the Northwest Territory or Yukon of Canada depends on the conditions of transportation as well as a market of other parts of Canada.

Knowledge, techniques and capital investments are powerful weapons in the utilization and improvement of natural resources. Judicious investment of labor and capital irrigation works, transport facilities, harbor developments, fertilizer and so on, can often greatly increase the output even from poor land. Similarly, technical advances in agricultural science may convert barren wastes into fruitful fields. However, men are not able yet to change the winds of Patagonia (a region in Southern Argentina and Chile known by its terrible winds), the heavy rains in parts of tropics, the monsoons in India, the long austere winters in Siberia and Canada. But the proportion of cultivable land, useful minerals, timber, water power, fuel and so on can be exploited by human knowledge of explorations and investigations. Accordingly, the value of a resource depends upon what human

beings are able to make use of it or not. The usefulness of a resource is changing all the time through changes in taste, changes in technical knowledge, new discovery or its environments. Coal, steam and steel were developed as important resources until men learned to use them since the first industrial revolution. Oil, electricity and water became dominant resources of production since the second period of industrial revolution at the beginning of the present century. Now, in the third period of industrial revolution, atomic energy plays the dominant role in the course of industrialization.³ Again, the availability of naturally-occurring material resources do not immutably determine the economic development of a country. The vast natural resources of the United States existed for many centuries, but that did not enable the Indians to pass beyond a most primitive level of achievement. And countries which had once been in the forefront subsequently lost their economic supremacy and came to join the ranks of the present underdeveloped countries; parts of Southern Europe, of the Mediterranean basin and of China in the Middle Age are examples. And moreover the changing fortunes of many countries have not been chiefly connected with the discovery or exhaustion of natural resources, but lack

³ Professor M. Lamontagne made striking analysis of the industrial and technical evolution by dividing it into three periods in his lectures on Government & Business in the University of Ottawa, Canada. Reference can also be made to his The Role of Government, published in the book entitled Canada's Tomorrow, edited by George P. Gimour and published by Canadian Westinghouse Co. Ltd., 1954.

of complementary factors of production such as technology, capital as well as economic and social developments.

Because of the scarcities of capital and skill, it is rarely possible for an underdeveloped country to make a thorough survey of natural resources before any exploitation. In some fields, governments have a special responsibility. Surveys generally need to be carried out under public sponsorship, whether the resource is mineral, timber, water-power or soil. Discovery of a new resource will increase the opportunity of investment. Improvements in the quality of a country's domestic raw materials or in the efficiency of the other productive factors tend to raise their development potential irrespective of whether they are exported or absorbed by local manufacturers.

Actually the economic quantity of resources available to a society is subject to change by many factors. New discoveries and improvements will add to resources. Trade of one society with other societies can also obtain the resources they want. Some resources can be increased in supply. Labor and capital can be increased, and land can be prevented from declining in productivity. Where resources are exhaustible, the supply at any time depends partly on the extent to which they have been exhausted. Most resources are in fact exhaustible. Mineral resources can be reduced in quantity and quality but water is usually renewed by nature.

The contribution of minerals depends on the way their utilization is distributed over time, and allowance for depreciation is impossible because there is no way of offsetting the exhaustion of supplies. Physical measurements of minerals in the ground suggest that minerals are very differently distributed among countries. However, these measurements are approximate and the knowledge of deposits is imperfect.

The estimated distribution of nine important mines is shown in Table XI. The rich North America is in possession of almost half of the world coal and iron, and 36 percent to 40 percent of the world lead, petroleum and zinc of estimated resources. One important mine of tin which does not exist in North America is located in Asia. However, there are only 9 percent of coal, 10 percent of iron, and less than 5 percent of copper, lead and zinc in Asia, while Africa and South America are even in a worse position. Underdeveloped countries are poorer in underground wealth compared with industrial countries, especially the North America.

With respect to the quantity of cultivated land, the method of measurement is a problem because the same size of land may have substantial difference in agricultural production. Whether it should be measured by its capacity of production or its market value is debatable. Land productivity is associated with soil, weather, labor, fertilizer, irrigation, etc.,

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TABLE XI
DISTRIBUTION AMONG AREAS OF ESTIMATED RESOURCES
OF NINE MINERALS IN 1948

Percentage of known resources of each mineral in each area

	Coal	Petroleum	Iron	Copper	Bauxite	Lead	Tin	Zinc
North America	47	36	34	20	2	18	..	28
U.S.	2	2	15	7	20	18	..	12
Others	49	38	49	27	22	36	..	40
Europe	13	1	15	2	16	12	1	15
USSR	24	6	11	10	2	6	3	8
Africa	5	..	5	30	23	6	10	6
Asia	9	42	10	2	26	4	77	4
Oceania	..	..	..	1	2	32	1	17
South America	..	13	10	28	9	9	8	10
	100	100	100	100	100	100	100	100

Source: U.S. Minerals Yearbook, 1949, p. 28.

while the market value of land is also connected with improvements to the land and other complementary factors.

As shown in Table XII, the cultivated land area as percentage of total land is largest in Italy and smallest in Australia. In so far as the cultivated land area per head of total population is concerned, Canadians enjoy more land per head while Chinese are at the bottom.

In view of the figures of minerals and cultivated land, most underdeveloped and overpopulated areas unfortunately have a low percentage of the world wealth. However, differentials of these estimated figures may exist because accurate surveys have never been conducted in underdeveloped countries as it has in most advanced countries. Undiscovered potential resources could possibly exist. Anyhow capital formation in areas with low level of natural resources must be more difficult than that of richly endowed areas.

2. Utilization of Natural Resources

Capital formation of a country is influenced by the utilization and not the mere availability of resources. This utilization is wholly a matter of human action. It depends upon the arrangements which permit and induce the use of resources. Since most resources are capable of use in more than one way, they must be allocated among different uses. Some allocation would yield more to national income than others. Consequently, the best allocation is necessary to

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TABLE XII

CULTIVATED LAND AS A PERCENTAGE OF TOTAL
LAND AREA OF PER HEAD OF POPULATION
IN SELECTED COUNTRIES, 1949

	Cultivated Land Area as percentage of Total Land	Cultivated Land Area per Head of Total Population (Acres)
Canada	2.9	5.29
Australia	1.7	4.71
Argentina	9.3	4.56
U.S.A.	22.8	3.13
USSR	7.9	2.43
Poland	35.6	1.65
France	36.3	1.22
India	37.9	.98
Italy	47.9	.77
Germany	42.8	.72
China: (Manchuria	11.9	.89
(a) Main Part	13.8	.29
(Sikang, Sinkiang and Tibet (No available figures)		

Source: A Graphic Survey of World Agriculture of
U.S. Department of Agriculture, 1949.

(a) Here the figures about China are given separately. Accurate materials are not available, but these three parts are roughly equal in size. An approximate proportion of 85 percent of total population is concentrated in the Main Part of China so the cultivated land per head is very low; Manchuria which includes nine provinces is the most industrialized and richest part of China but is possessed of about 10 to 15 percent of the total population; and finally, the provinces of Sikang, Sinkiang and Tibet, which are a vast wild area like Canada's Northwest Territory and Yukon, have only less than 5 percent of the total population.

secure full utilization. Decisions concerning utilization may be derived from the mechanism of market, or from the decisions of socialist governments. This section is only interested in the utilization of natural resources under the free enterprise system of most underdeveloped countries of the world today. The utilization of human resources has been touched in Chapter IV and is ignored here.

The idleness of natural resources such as minerals, land, water power, oil and other raw materials contributes little to national income. The right to utilize unmined minerals can be sold before they are utilized. Sales to foreigners make foreigners' purchasing power available. Before the Second World War, China, for example, was made to recognize (not sold) some special privileges to foreign Powers to the rights of mining in certain districts of Chinese territory which usually were within 20 or 50 miles along both sides of certain railways. However, this type of so-called "unequal treaties" with China were abolished since November 1943 after the Cairo Conference.⁴

The ownership of minerals is different in different countries. The ownership of mineral rights in some countries is associated with private rights over the surface of the land.

⁴ Cairo Conference was participated by President Chiang Kai-shek of China, President Franklin D. Roosevelt of the United States and Sir Winston Churchill of Great Britain.

The United States and the United Kingdom, for example, grant most minerals to surface owners. Some Latin American government reserves petroleum or other important minerals, while USSR, Japan and the Chinese Communist governments declared all minerals the properties of the state.⁵

It is argued that the use of domestic raw materials in local factories has to be stressed, because it is in the interest of industrialization to have the raw materials supplied to local factories priced as low as possible, and it is also desirable that primary products exported from the country should be locally processed as far as possible. For the price of domestic raw materials to be low, productivity in the primary activities of mining and farming should be high. This is also the basic prerequisite for the release of factors for the development of secondary industry. Where the manufacturing industry is using a domestic primary product that is otherwise exported, the distribution of those raw materials is likely to be fairly efficient. This is the situation in the jute industry of India and the silk industry of China and Japan. Given efficient manufacturing, such industries are in a strong position compared with foreign factories using the same raw materials. It is thus preferable for an industry to use domestic raw materials rather than rely on imports,

⁵ Of this point, Arthur R. Burns gives a detailed description in his Comparative Economic Organization, 1955, Chapter 15.

for not only does the importing of raw materials place a burden upon the country's foreign exchange resources but part of the development potential of a new industry gives stimulus to the local production of raw materials it requires. The country stands to gain most from an economic development that involves the mutual dependence of primary and secondary industry which must depend upon each other, and in many cases local raw materials may be unsuitable for the local market.

The extent of the utilization of cultivated land has been mentioned in last section. Non-agricultural uses take a relatively small portion in comparison with that for agriculture. An accurate measurement seems impossible, because the extent of the utilization of land depends not only on the amount of usable land in use but also on the effectiveness of its use. Physical output varies, because of different weather conditions, actual capital investment, as well as methods of cultivation.

Conditions of land tenure may have effect on the productivity of the land. Under some circumstances, the feudal landholders have regarded themselves as revenue or rent collectors with no concern for the use of the land. Even semi-feudal relations are often established in areas where governments fail to protect them and their crops, for example, from invasion by nomads. Private property in land may also produce different results in different countries because of

differences in the behavior of governments and owners. The conditions of leases have an effect on the use of land too. The phenomenon of inequality of land ownership is still very common in most underdeveloped countries. This is mainly a result of the absence of a proper state policy of equality in land ownership. Many Chinese as well as foreigners considered that part of the Chinese Nationalist Government's failure in China Mainland was due to its failure to carry out Dr. Sun Yat-sen's doctrine of equality of landownership.⁶ Landlords continued to collect rents which ranged as high as 50 to 70 percent of total crops. Communists presented themselves to the peasants as agrarian reformers, which was a false masquerade.

As soon as the Chinese Nationalist Government moved from the Mainland to Taiwan, the policy of equalization of land ownership was enforced on that island which was considered very successful by United Nations experts.⁷ The so-called "land-to-the-tiller program" allowed each landlord to retain the equivalent of no more than three hectares of medium acreage paddy field and all private tenanted lands in excess of this retention acreage were compulsorily purchased by the government and resold to tenants who were tilling those lands on lease or

⁶ Equalization of Land Ownership was one of Dr. Sun Yat-sen's doctrines; see his Principle of Livelihood, Lecture two.

⁷ United Nations, Economic Survey of Asia and the Far East, 1954, p. 88.

contractual terms. The resale price were 2.5 times the value of the annual main crops payable by tenant purchases in 20 instalments within ten years. Seventy percent of the government purchase price was paid in commodity bonds to be redeemed in rice and sweet potatoes in 20 instalments over ten years, and 30 percent in stock issued by the four government-owned enterprises.⁸ The performance of the land reform was sponsored by Sino-American Joint Commission on Rural Reconstruction,⁹ and its effects¹⁰ have been envisaged by increased products and improved living conditions in rural areas. It was learned that some governments of underdeveloped countries such as Turkey, Iraq, Jordan and South Korea sent specialists to Taiwan to study the case of land reform so as to be used in their own countries.

The effective utilization of water for agriculture, for power and for other multi-purposes is also very important. Where rain is unreliable and poorly distributed over time (as in India and Pakistan) irrigation can greatly increase agricultural output. The extent to which water is used depends on the arrangements controlling its use, knowledge of available methods, the cost of capital, and the intensity of concern of economic development. In the Middle East, water irrigation is

⁸ China Handbook, 1955-1956, pp. 507-512.

⁹ Han Lih-Wu, Taiwan Today, English edition, Chapter IV, Taiwan:Huo Kuo Co.

¹⁰ United Nations, Economic Survey of Asia & the Far East, 1954, p. 89.

most extensive. The urgent need for Aswan Dam in Egypt brought forth the Suez Canal problem in 1956, because it was estimated that approximately one third of Egyptian peasants would be benefitted upon completion of that dam. Surface water may be stored for later use in the dry season by collecting in tanks in rainy season and subsequent release through canals and ditches. Water can also be stored for later use by building dams to create reservoirs. The utilization of water power has much economic significance to the industrialization of an economy. Most backward countries cannot make intensive use of water because the availability of technical knowledge, capacity of capital investment and the extent of market are usually insufficient. The most striking increase in knowledge of methods of using water resources lies in the development of water works serving more than one purpose, sometimes using the same water successively in several ways. An illustration of multiple benefits of a very big water investment in "The Shihmen Project" in Taiwan is given here.

The Shihmen Reservoir Project is located 40 kilometres south of Taipei city on a tributary Tanshui River. A dam about 129 metres high will create a reservoir which will store and detain floods for the protection of Taipei city and the low land along the Tanshui River, supply water to irrigate 54,000 hectares of land, generate 122 million kilowatt-hours of power and supply water for the needs of 340,000 town people and of

industry.¹¹ A same volume of capital invested in a multi-purpose project in many cases would contribute more to the national income than that for a single purpose.

There is no certain evidence that natural resources are specially abundant in underdeveloped countries. Effective utilization of their resources or keeping them idle would make significant differences in the increase of their national income which in turn affect capital formation and economic development. Sufficient research and accurate planning as well as technology and skills must play a dominant part in this respect. Governments are required in most of the underdeveloped countries to take initiative in the guidance of effective utilization of natural resources and keep from misallocation and misdirection of their natural resources.

¹¹ United Nations, Economic Development and Planning in Asia and Far East, Nov. 1957, p. 54.

CONCLUSIONS

Throughout the foregoing discussions, principles and rules used in the context with regard to the processes and problems of capital formation in underdeveloped countries, apply primarily to those with a free enterprise system. Human beings are treated as individual units who decide what they think will benefit them most. Governments as well as social institutions play only roles of maintaining economic stability, providing social welfare and assisting the individuals to enable them to carry out their own desires.

Free enterprise is, however, no longer a system like it was in the nineteenth century. Government interference was strongly sponsored by Keynesian economists since 1930's in the Western World. And moreover, since the beginning of this century, Moscow, with Marx as its prophet, proclaimed Communism as the ideal of social justice and as the basis for making masses of people unified in purpose and in action. Accordingly, the centrally planned economy came out as a new brand to be a country's policy. The economic architects determine what use is to be made of limited resources. Their targets are set according to an objective determined by the state, either producing for war or raising the mass standard of living, and thus do not allow price and income movements to

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regulate the productive process. The important roles of entrepreneurs are substituted by a few economic architects.

Not only newcomers to the ranks of socialist countries such as Red China and Eastern European countries are closely following the steps of Russian methods, but many countries of the free world are trying to set their compass of economic development by catching up the efficient planning way. This thesis does not go into the problems of capital formation in centrally planned economies, but we must remind ourselves that there is such a prevailing system besides the one we are concerned.

Because of tremendous difficulties of raising capital from private sources, economic advancement through central planning is overwhelmingly favored in many of the underdeveloped countries. According to a United Nations economic survey of Asia and the Far East,¹ Cambodia, Hongkong, Indonesia, Nepal and Thailand have at present no overall coordinated economic development plans. The development programs of India, Pakistan, Ceylon, Malaya were outlined in five-year development plans. Burma, the Republic of China, the Philippines and the Republic of Korea have also completed the formulation of development plans. Mainland China is in a class by itself, having a centralized Five-year plan which started

¹ Economic Survey of Asia and the Far East, 1954, p. 48.

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in 1953. The tendency shows that the more these countries are frustrated by going through the free enterprise system, the more they set their courses of industrialization towards a collectively central-planning direction.

In reality, the private enterprise system may not conflict with national plans and policies with respect to economic development. The successful marshalling of national resources for this purpose carries with it an acknowledgement of responsibility of the part of both the people and the government for the country's future. People must be willing to change their traditional habits and customs and devote themselves to their economic improvement. Government fiscal and tax policies must be geared to induce domestic savings and channel them into investment, for such policies are a major instrument for creating an environment favorable to the expansion of capital growth. Maximum participation of local private enterprise in economic development must be stimulated. In addition, the stability of a country's economy is essential because instability is the enemy of economic growth.

Government and private institutions can educate the general public in the importance and virtue of savings, and an idea of holding wealth in the form of deposits should be promoted and stressed. A well-organized monetary as well as capital market would contribute most in this respect. Banking facilities and savings institutions are desirable to drain

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off part of income and siphon^{it} into development investment. Conditions can be established which are conducive to the existence of an orderly securities market in which the public would have confidence.

The fast-growing populations in countries of Asia may impede their economic improvement because an increased income is offset by an increasing number of consumers. Social education as well as birth control may be necessary so as to harmonize the space of economic and population growth. Problems of disguised unemployment should be solved by an overall national planning of balanced growth by transferring the unemployed into productive industries. Knowledge of modern technology could be taught through education and a class of entrepreneurs should be cultivated to take care of the processes of industrialization.

A complete survey of natural resources in underdeveloped countries needs to be conducted so as to make a wise allocation and utilization of the limited wealth. Improvement such as irrigation and fertilization will yield increasing productivity which in turn offers a bigger income. The most important and perhaps quickest way through which they may keep themselves from falling far behind the industrial countries is to have their countries industrialized by all means available.

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