KEYNESIAN ECONOMICS AND UNDERDEVELOPED COUNTRIES

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CHAPTER I

INTRODUCTION

In recent years the process and problems of economic development of the underdeveloped countries have drawn widespread interest of economists and policy-makers of nations of the modern world. In recent years there have also been significant developments in economic thought growing out of and building on the ideas of J. M. Keynes.[1]

Keynesian economics is a method of economic analysis which focuses attention on the operation of the economic system as a whole utilizing the so-called aggregative approach (commonly known as the macroeconomic approach). It is concerned with such concepts as national income, saving, investment, and consumption--all of them as total aggregate quantities.[2] The study of macroeconomics developed by Keynes and his followers (such as Hansen, Harrod, Domar, Hicks, Samuelson, Lerner and others) is called "Keynesian economics" and "Post-Keynesian economics".

Considerable interest has been shown in the question of the applicability of modern macroeconomic theories to the underdeveloped

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[1]J. M. Keynes, _The General Theory of Employment, Interest, and Money_ (New York: Harcourt, Brace and Co., 1936).

[2]The economic theory of Keynes is different from the classical and neo-classical approach. The classical economists were not concerned in studying the economy as a whole but they were concerned about the behavior of individuals as consumers, workers, land owners and entrepreneurs. They believe that an equilibrium among the individual prices would automatically be established through the market-mechanism.

countries[1] and in formulating theories of development[2]. In the 1950's some important contributions were made by leading economists in both developed and underdeveloped countries on the question of whether Keynesian economic analysis, which was said to be the cure for the solution of the short-run cyclical underemployment equilibrium problems of the advanced industrialized countries, has significant applicability to the long-run problems of

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[1]R. F. Harrod, "An Essay in Dynamic Theory," Economic Journal, April, 1939; Idem., Towards a Dynamic Economics (London: Macmillan and Co., 1948); E. D. Domar, Essays in the Theory of Economic Growth (New York: Oxford University Press, 1957), chaps. 3, 4, and 5; H. J. Bruton, "Growth Models and Underdeveloped Economies," Journal of Political Economy, August, 1955; Idem., "Contemporary Theorizing in Economic Growth," in Bert F. Hoselitz and others (eds.) Theories of Economic Growth (Glencoe, Ill.: The Free Press, 1960), pp. 239-298; B. Higgins, Economic Development: Problems and Policies (New York: Norton and Co., 1959), chaps. 2-8; A. H. Hansen, "Economic Progress and Declining Population Growth," American Economic Review, March, 1939. Vol. 29, pp. 1-15.

[2]H. Leibenstein, Economic Backwardness and Economic Growth (New York: John Wiley and Sons, 1957); B. Higgins, Economic Development: Problems and Policies, op. cit., chaps. 11-17; A. O. Hirschman, The Strategy of Economic Development (New Haven: Yale University Press, 1958), chaps. 2-4; P. N. Rosenstein-Rodan, "Problems of Industrialization of Eastern and South Eastern Europe," Economic Journal, June-September, 1943; Robert Solow, "A Contribution to the Theory of Economic Growth," Quarterly Journal of Economics, February, 1956. 70 (1): 65-94; H. W. Singer, "The Mechanics of Economic Development," Indian Economic Journal Review, August, 1952; B. F. Hoselitz, "Patterns of Economic Growth," Canadian Journal of Economics and Political Science, 21 (4): 416-431; R. Nurkse, Problems of Capital Formation in Underdeveloped Countries (New York: Oxford University Press, 1953); W. A. Lewis, The Theory of Economic Growth (Homewood, Ill.: Richard D. Irwin, Inc., 1955); and Paul Streeten, "Unbalanced Growth," Oxford Economic Papers (June, 1958).

underdeveloped countries.[1]

The main purpose of this report is an attempt to examine some points relating to the Keynesian economic analysis in the context of the modern underdeveloped countries. Chapter II enumerates the basis characteristics and discusses the meaning of underdevelopment. Chapter III attempts to point out that the main objective of economic policy in underdeveloped countries is economic development rather than Keynesian full employment. Chapter IV attempts to show that there is a basic difference between Keynesian unemployment and Non-Keynesian unemployment. Chapter V relates Keynesian concepts of consumption, investment, and the multiplier to underdeveloped countries. Chapter VI deals with capital formation in underdeveloped countries, and Chapter VII is devoted to a discussion of Post-Keynesian growth theory including Harrod's model, Domar's model, and Singer's model and the controversy over balanced versus unbalanced growth.

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[1]A. K. Das Gupta, "Keynesian Economics and Underdeveloped Countries,"; V. K. R. V. Rao, "Investment, Income and the Multiplier in an Underdeveloped Economy,"; V. B. Singh, "Keynesian Economics in Relation to Underdeveloped Countries"--all these three have been published in V. B. Singh (editor), Keynesian Economics--A Symposium (New Delhi: People's Publishing House, Ltd., 1956); V. K. R. V. Rao, "Full Employment and Economic Development," Indian Economic Review, August, 1952; K. S. Gill, "Keynesian Economics and the Underdeveloped Countries," Indian Economic Journal, October, 1954; K. K. Kurihara, The Keynesian Theory of Economic Development (New York: Columbia University Press, 1959); and A. Mathur, "On 'Throwing the Baby Away with the Bath-Water': An Essay in the Defence of Keynesism in Relation to Underdeveloped Countries," Indian Economic Journal, April-June, 1965.

CHAPTER II

WHAT IS AN UNDERDEVELOPED COUNTRY?

Basic Characteristics

The basic characteristics of an underdeveloped country have been described by a general manager of the U. N. Special Fund (for economic development) as follows:

> Everyone knows an underdeveloped country when he sees one. It is a country characterized by poverty, with beggars in the cities and villagers eking out a bare subsistence in the rural areas. It is a country lacking in factories of its own, usually with inadequate supplies of power and light. It usually has insufficient roads and railroads, insufficient government services, poor communications. It has few hospitals, and few institutions of higher learning. Most of its people cannot read or write. In spite of the generally prevailing poverty of the people, it may have isolated islands of wealth, with a few persons living in luxury. Its banking system is poor; small loans have to be obtained through money lenders who are often little better than extortionists. Another striking characteristic of an underdeveloped country is that its exports to other countries usually consist almost entirely of raw materials, ores or fruits or some staple product with possibly a small admixture of luxury handicrafts. Often the extraction or cultivation of these raw material exports is in the hands of foreign companies.[1]

Meaning

The United Nations experts use the term 'underdeveloped' to mean "countries in which per capita real income is low when compared with the per capita real incomes of the United States, Canada, Australia and Western Europe."[2] Per capita real income is defined in the form $y = Y/P$, where y = per capita income, Y = real nation income, and P = the size of population.

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[1]P. G. Hoffman, One Hundred Countries--One and One Quarter Billion People (Washington, D. C.: Committee for International Economic Growth, 1960), p. 14.

[2]United Nations, Measures for the Economic Development of Underdeveloped Countries (New York, 1951), p. 3.

Change in per capita income is a useful measure of economic progress. There will not be an increase in per capita income and hence be no economic progress if the growth of population exceeds the growth of output so that each person is worse off than before.

Table I presents some recent estimates per capita output in the various countries of the world for the year 1957. According to these estimates about two billion people--or two-thirds of the world's population--live in almost 100 countries where per capita income is below $300. These countries were once simply called "poor" or "backward" but recently have been called "underdeveloped" or "less developed".

TABLE I

Per-Capita Output in 1957 (Converted to U. S. dollars by means of foreign exchange rates)

Group A: Annual Per-Capita Output of $0-$100 (Includes 49.7% of the World's Population)

America: Falkland Islands and Bolivia, Greenland.

Asia and Middle East: Afghanistan, Bhutan, Brunei, Burma, Cambodia, China, Gaza Strip, India, Maldive Islands, Mongolian People's Republic, Muscat and Oman, Nepal, Neth. New Guinea, North Borneo, North Korea, Pakistan, Sarawak, Thailand, Truncial Oman, Vietnam (North and South), Yemen.

Africa: Angola, Belgian Congo, Br. Cameroons, Eritrea and Ethiopia, Fr. Equatorial Africa, Fr. West Africa, Gambia, Kenya, Liberia, Libya, Madagascar, Mozambique, Nigeria, Ruandi-Urundi, Somaliland, South West Africa, Span. Guinea, Sudan, Tanganyika, Togoland, Uganda and others.

Oceania: Australian Oceania, Br. Oceania, Fr. Oceania, New Zealand Oceania, U. S. Oceania, Naura, New Hebrides, New Guinea, Pacific Islands (U. S.), Western Samoa (N. Z.).

TABLE I (continued)

Group B: Annual Per-Capita Output of $101-$300
(Includes 17.1% of the World's Population)

Latin America: Brazil, British Guiana, Br. Honduras, Colombia, Dominican Republic, Ecuador, El Salvador, Fr. Guiana, Guadeloupe, Guatemala, Haiti, Honduras, Martinique, Mexico, Neth. Antilles, Nicaragua, Paraguay, Peru, St. Pierre and Miquelon, Surinam, Virgin Islands, West Indies (other).

Europe: Albania, Andorra, Faeroe Islands, Portugal, Spain, Yugoslavia.

Asia and Middle East: Aden, Bahrein, Ceylon, China (Taiwan), Hong Kong, Indonesia, Iran, Iraq, Jordan, Korea (South), Macao, Philippines, Port India, Port. Timor, Ryukyu Islands, Saudi Arabia, Turkey, U. A. R.

Africa: Algeria, Fr. Cameroons, Ghana, Mauritius, Morocco, Rhodesia and Nyasaland, Tunisia.

Group C: Annual Per-Capita Output of $301-$600
(Includes 18% of the World's Population)

Latin America: Argentina, Canal Zone, Chile, Costa Rica, Cuba, Federation of West Indies, Panama, Puerto Rico, Uruguay.

Africa: Union of South Africa.

Asia and Middle East: Japan, Malaya, Singapore, Lebanon, Cyprus.

Europe: Bulgaria, E. Germany, Gibraltar, Greece, Hungary, Iceland, Ireland, Italy, Malta, Poland, Rumania, San Marine, U. S. S. R.

Group D: Annual Per-Capita Output of $601-$1,200
(Includes 7.5% of the World's Population)

Latin America: Venezuela.

Asia and the Middle East: Israel.

Europe: Austria, Belgium, Czechoslovakia, Denmark, Finland, France, W. Germany, Liechtenstein, Monaco, Netherlands, Norway, United Kingdom.

Group E: Annual Per-Capita Output of $1,200 and Above
(Includes 7.7% of the World's Population)

America: United States and Canada.

Europe: Luxemburg, Sweden, Switzerland.

Asia: Kuwait*, Qatar*.

TABLE I (continued)

Group E: Annual Per-Capita Output of $1,200 and Above
(Includes 7.7% of the World's Population)

Oceania: Australia and New Zealand.

*The unexpected appearance of Kuwait and Qatar in Group E can be explained in one word: oil.

Since these figures on output per capita are converted to U. S. dollars by means of foreign exchange rates, they tend to overstate the differences between the economically advanced countries and the underdeveloped countries. Nevertheless, the gap is so great that even when a generous correction is made, the differences in comparative living standards are still enormous. All the countries in Groups A and E must be considered seriously "underdeveloped". Together, these two groups constitute 66.8% or about two-thirds of the world's population.

Source: Richard T. Gill, Economic Development: Past and Present (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1963), pp. 82-83.

CHAPTER III

KEYNESIAN FULL EMPLOYMENT AND ECONOMIC DEVELOPMENT

The main objective of economic policy in developed countries is to secure full employment, while in underdeveloped countries it aims at economic development and providing minimum subsistence level, that is to say, increasing per capita income and providing employment to everyone. The following discussion will show that the main objective of economic policy in underdeveloped countries is economic development rather than Keynesian full employment.

Full Employment and Effective Demand

According to Keynes, full employment is the absence of involuntary unemployment. In the classical theory, this type of unemployment does not exist since they assume full employment. Keynes defines involuntary unemployment as follows:

> Men are involuntarily unemployed if, in the event of a small rise in the price of wage-goods relatively to the money-wage, both the aggregate supply of labour willing to work for the current money-wage and the aggregate demand for it at that wage would be greater than the existing volume of employment.[1]

To put it in more precise terms, in a case of full employment, the marginal net productivity of labor (or real wage rate) is equal to the marginal disutility of labor; in a case of involuntary unemployment, the marginal net productivity of labor (or real wage rate) is greater than the marginal disutility of labor. It follows that decrease in the real wage rate would

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[1] J. M. Keynes, The General Theory of Employment, Interest and Money (New York: Harcourt, Brace and Co., 1936), p. 15.

increase employment. Moreover, Keynes includes both frictional and voluntary unemployment in his full employment concept.

Since Keynes concludes that equilibrium is not only possible but likely at less than full employment, he argues that the classical theory is a special case of full employment. As he argues that:

> --- there is no reason in general for expecting it to be equal to full employment. The effective demand[1] associated with full employment is a special case, only realised when the propensity to consume and the inducement to invest stand in a particular relationship to one another. This particular relationship, which corresponds to the assumptions of the classical theory, is in a sense an optimum relationship. But it can only exist when, by accident or design, current investment provides an amount of demand just equal to the excess of the aggregate supply price of the output resulting from full employment over what the community will choose to spend on consumption when it is fully employed.[2]

He said that there is a deficiency of demand when effective demand tends to settle at a level below full employment. Thus one may say that Keynes' theory of employment depends upon effective demand as he had shown that:

> When effective demand is deficient there is unemployment of labor in the sense that there are men unemployed who would be willing to work at less than the existing real wage. Consequently, as effective demand increases, employment increases, though at a real wage equal to, or less than, the existing one, until a point comes at which there is no surplus of labor available at the then existing real wage, i.e. no more men (or hours of labor) available unless money wages rise (from this point onwards) faster than prices.[3]

In other words, employment reaches a point at which the supply of output as a whole ceases to be elastic, i.e. where a further increase in the volume of effective demand will not be accompanied by any increase in output.

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[1]Effective demand is the volume of demand for output as a whole being such that its aggregate supply price is equal to this aggregate demand price.

[2]*Ibid.*, p. 28.

[3]*Ibid.*, p. 289.

This leads Keynes to give an alternative definition of full employment as "a situation in which aggregate employment is inelastic in response to an increase in the effective demand for its output."[1] Thus the Keynesian conception of full employment involves the following three conditions.

(a) An appropriate volume of effective demand.

(b) Real wage equal to marginal disutility of labor.

(c) Lack of response in output to any further increase in either demand or employment.

Therefore, the policy[2] for full employment is one of increasing effective demand to the appropriate level. Once this level is reached, any further increase in effective demand will raise money prices and lead to true inflation, where rising prices will not be associated with an increasing aggregate real income.

The Process of Economic Development

The Report on *National and International Measures for Full Employment* states that:

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[1]*Ibid.*, p. 26.

[2]These policies are cheap money, deficit financing, redistributive taxation, and public investment, which have all become current coin in national economic policies for achieving full employment.

> In the underdeveloped countries, the lack of capital equipment is a crucial factor in large-scale underemployment which, although it may not emerge in the form of urban unemployment, is nevertheless reflected in the fact that a large part of the population could be diverted from agricultural occupations without any decrease of agricultural output. The only remedy for this form of disguised unemployment[1] is economic development, which constitutes the major economic problem of the world.[2]

This means that, in underdeveloped countries, disguised unemployment exists which is due to a deficiency of capital equipment to employ productively the available supply of labor. This is not the Keynesian type of unemployment due to a deficiency of effective demand, and suggests that the remedy for unemployment is economic development. Another Report by a committee of United Nations exports has clarified the problem further by pointing out that the task of economic development is the rapid creation of new employment.[3]

Now, one can see clearly the distinction between the Keynesian concept of full employment and the employment concept pertinent to economic development. Broadly speaking, Keynesian full employment can be maintained only by increasing effective demand to the appropriate level, while economic development decreases the level of underemployment by creating new opportunities for efficient employment. This should be brought by increasing the volume of the capital equipment necessary to secure the productive employment of available labor. Thus the problem shifts from deficiency of demand in full employment to deficiency of capital equipment in economic development.

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[1]In the modern theory of disguised unemployment this means that the marginal productivity of labor is zero and may even be negative.

[2]United Nations, National and International Measures for Full Employment (New York, 1949), p. 12.

[3]United Nations, Measures for the Economic Development of Under-developed Countries (New York, 1951), p. 19.

Full employment in the Keynesian sense is essentially a short-run and static concept; while economic development is a long-run and dynamic concept, since the time required for increasing effective demand is much shorter than that required for capital accumulation.

Underdeveloped countries are characterized by the existence of disguised unemployment, production for self-consumption, household enterprise, dominance of agriculture, and deficiency of capital equipment and of technical knowledge. Under such conditions, Dr. V. K. R. V. Rao postulates that:

> Apart from the levels of full employment visualized by Keynes, there are as many levels of full employment as there are different stages of economic development. Indeed it is the transition from the level of full employment appropriate to a lower stage to another appropriate to a higher stage which constitutes the process of economic development.[1]

According to Dr. Rao the process of economic development can take place on two different levels as follows:

(a) The process of economic development within a given economic structure. Here the level of economic activity may move from a lower to a higher level without the economy as a whole moving.

(b) the economy as a whole may move from a lower to a higher stage of economic organization. This would mean structural changes (the replacement of one type of economic organization by a higher one). The latter is the process of economic development in underdeveloped countries.

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[1]V. K. R. V. Rao, "Investment, Income and the Multiplier in an Underdeveloped Economy," The Economics of Underdevelopment, edited by A. N. Agarwala and S. P. Singh, (New York: Oxford University Press, 1963), p. 218.

In other words:

> Under the Keynesian concept, one moves along one unique curve of full employment that is appropriate to the given datum of resources, capital and skills. In the case of economic development, one moves from one curve of full employment to another, each higher than the other and appropriate to the respective higher level of resources, capital and skills that constitute the ladder of economic growth.[1]

The Keynesian concepts are applicable to the first case but not to the second. The economic development of the underdeveloped countries requires structural changes and socio-economic reorganization, and this aim may not be fulfilled by Keynesian policies which are aimed merely at increasing aggregate demand.

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[1]V. K. R. V. Rao, "Full Employment and Economic Growth," Essays in Economic Development (New York: Asia Publishing House, 1964), p. 61.

CHAPTER IV

CONCEPT OF UNEMPLOYMENT

Keynesian Unemployment

Although unemployment is the same symptom in both developed and underdeveloped countries, the causes of unemployment in both types of countries are different. In advanced industrialized countries unemployment arises mainly from deficiency of effective demand to fully utilized the existing capital stock. This is what has been called Keynesian unemployment or involuntary unemployment as already has been defined in Chapter III (see page 8).

Non-Keynesian Unemployment

In underdeveloped countries, unemployment arises primarily from the insufficiency of capital equipment, entrepreneurship, technically trained manpower and perhaps many other factors, even when available resources are fully utilized and when effective demand is sufficient. The chronic shortage of capital is relative to a growing labor population. This type of unemployment manifests itself largely in unproductive occupations known as "disguised unemployment" (see page 11) and which Joan Robinson has chosen to call "Marxian unemployment".[1] K. K. Kurihara calls it "Non-Keynesian unemployment" or "Structural unemployment".[2]

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[1]J. Robinson, "Marx and Keynes," in Collected Economic Papers (London: Basil Blackwell and Mott, Ltd., 1960). Vol. I.

[2]K. K. Kurihara, The Keynesian Theory of Economic Development (New York: Columbia University Press, 1959), p. 109.

Application to Underdeveloped Countries

The presence of disguised unemployment causes a significant difference in the applicability of the Keynesian economics to the underdeveloped countries. Many economists (e.g. Arthur Lewis, R. Nurkse, and P. N. Rosenstein-Rodan) believe that disguised unemployment cannot be curable by the same methods as Keynesian unemployment in industrial countries. Increasing effective demand by means of easy money policies and deficit spending may not only be insufficient but positively harmful. The supply of 'wage goods' which is predominantly food in the underdeveloped agricultural countries is very rigid in the short-run such that a monetary expansion merely results in a price inflation.[1]

In addition, Keynesian unemployment implies an elastic supply of labor at the current wage level. Those who are unemployed in agriculture in underdeveloped countries do not fall exactly in this category for two reasons.

(a) Most unemployed in the predominantly rural sector of the economy do not really know or feel that they are unemployed. Therefore, they are not seriously looking for employment.

(b) They are already receiving a real income which presumably gives them at least the same satisfaction as they would get by taking up employment at the current wage level. A higher wage-offer may be required to induce them to offer themselves for employment elsewhere and, therefore, they are not unemployed in the Keynesian sense.

In most underdeveloped countries, population grows very rapidly. About

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[1] R. Nurkse, Problems of Capital Formation in Underdeveloped Countries (New York: Oxford University Press, 1953), p. 36.

two-thirds of the total world-wide increase in population has taken place in Asia and has been due largely to a fall in death-rates. This rapid population growth rate in underdeveloped countries causes labor surplus on the land which implies that the marginal product is less than the average. Further population growth brings down the average level of consumption because the additional labor contributes less than the average worker previously, and so it pulls down the average product per head.

Since the real problem of underdeveloped countries is economic development as already mentioned in Chapter III, to remedy the mass unemployment of the non-Keynesian type occurring there, underdeveloped countries must alter their economic structure, revolutionize their techniques of production, and, above all, achieve a sufficiently rapid increase in real capital accumulation through effective savings to counteract the depressing effects of a rapidly growing population.[1]

In sum, Keynes' general theory of employment lacks generality in the sense that Keynes did not focus on unemployment which exists due to lack of capital stock even when fully utilized--that is, even when effective demand is sufficient to fully utilize the existing capital stock. His theory of employment applies to a short-run condition where capital accumulation, population growth, technological advance and other fundamental conditions of supply are taken as given, and where therefore the volume of employment is determined by the level of effective demand. "Thus Keynes' theory runs the risk of being applied in rationalizing the pyramid-building variety of

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[1]V. B. Singh, "Keynesian Economics in Relation to Underdeveloped Countries," Keynesian Economics: A Symposium (New Delhi: People's Publishing House, Ltd., 1956), p. 188.

unproductive employment policy just to stabilize or increase effective demand."[1]

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[1]Kurihara, *op. cit.*, p. 100.

CHAPTER V

CONSUMPTION, INVESTMENT, INCOME AND THE MULTIPLIER

The Basic Keynesian Theory of Employment

The basic Keynesian theory of employment can be summarized as follows: that the volume of employment (N) and of income (Y) is determined by effective demand; that the effective demand is determined by the rate of investment (I) and the propensity to consume (C)[1]; that the volume of I depends upon the rate of interest (r) and the marginal efficiency of capital (MEC); and r is determined by the quantity of money and the liquidity preference (LP).

Since C has a relatively stable relationship to Y, it is I that determines N and Y. Keynesian I depends on the MEC and r; if MEC $<$ r, the rate of I will slow down. In the long-run, Keynes thought the MEC had a significant tendency to fall. Keynes treats r as a predominantly monetary phenomenon as determined by LP. Supply of money is given by the banking system; hence, r can be manipulated by the monetary policy of the government and the central bank. Keynes was, however, aware of the fact that the

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[1]Keynes defines the propensity to consume as "the functional relationship X between Y_W, a given level of income in terms of wage-units, and C_W the expenditure on consumption out of that level of income, so that

$$C_W = X(Y_W) \quad \text{or} \quad C = W.X(Y_W)\text{"}$$

(in his *General Theory* p. 90). This is what is known as a "consumption function" which is based on the psychological propensity to consume. It means that C is a variable determined by the size of Y. That is, consumption expenditure is a stable proportion of Y at each level of Y and the proportion falls as Y rises. In other words, at any Y level, people tend to spend a certain fixed proportion of Y on consumption.

influence on the banking policy on r will not always be sufficient to determine an optimum rate of I. This is because at a low r, the liquidity function is almost perfectly interest-elastic. Thus, the rate of increase in I tends to lag behind savings (S) generating N, Y and production which is less than full employment equilibrium. That is why Keynes sought to prescribe 'socialization of investments' as a powerful weapon to fight unemployment and the economic stagnation which characterized the 1930's. As Keynes says:

> ... it seems unlikely that the influence of banking policy on the rate of interest will be sufficient by itself to determine an optimum rate of investment. I conceive, therefore, that a somewhat comprehensive socialization of investment will prove the only means of securing an approximation to full employment; ...[1]

Patterns of Consumption

According to Keynes, as Y increases, C also increases but less than Y. He believed, moreover, that the marginal propensity to consume (MPC) declines with increasing Y. Therefore, MPC ($\Delta C < \Delta Y$) is always less than unity. This Keynesian concept does not apply to the modern underdeveloped countries, since MPC is equal to or almost equal to unity. This tends to be true for two reasons.

(a) In the case of low Y families, as Y increases, they will spend all Y to improve their social status and standard of living.

(b) For high Y families, as Y increases, they attempt to emulate a rich country's consumption pattern which is what is known as international

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[1]Keynes, The General Theory, p. 378.

"demonstration effect".[2] This is because of the colonial interpenetration of the East by the West during the nineteenth century and the dramatic improvements in the means of communications in the twentieth century. Since MPC is high in underdeveloped countries it follows that marginal propensity to save (MPS) is low and this low MPS keeps the rate of I and capital accumulation at a low level.

Multiplier Principle

Keynes has emphasized the fact that it is the increase in I which results in an increase in Y and this increase in Y leads to an increase in S. The MPC determines the relation between an increment of I and the appropriate increment of Y which will induce the increment of S necessary to maintain S = I. This relationship between increment of I and that of Y is determined by the investment multiplier (k), the formula being $\Delta Y = k\Delta I$ where MPC = $1 - 1/k$. As the MPC declines with increasing Y, increasingly larger increments of I become necessary for securing a given increment of Y.

According to Keynes, in poor communities the MPC is almost unity and therefore the k is also high. This means that a comparatively small increment in I is sufficient to secure full employment. On the other hand, as the average propensity to consume (APC) is also very high, I represents a very small portion of the aggregate output and Y in underdeveloped countries. This is in contrast with the conditions of the advanced countries where the APC is low and I constitutes a larger portion of Y. Fluctuations

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[1]The term "demonstration effect" was originally developed by J. S. Duesenberry to explain how consumers might be affected by the living standards of other consumers within the domestic economy. This general notion was applied to the international sphere by R. Nurkse in his important book, Problem of Capital Formation in Underdeveloped Countries (New York: Oxford University Press, 1953), chapter III.

in I in the advanced countries account for a larger fluctuation in N even though the multiplier is lower. This analysis of Keynes leads to three basic conclusions concerning the operation of an economy as follows:

(a) the poorer the community, the greater is its facility for achieving condition of full employment and the smaller is the fluctuation in N caused by a change in I.

(b) the more advanced the countries the more difficult it is to secure full employment and the greater is the fluctuation in N as a result of a change in I.

(c) Instability in I is more likely to occur in the richer communities. Therefore, unless offset by increased I, which may require the abandonment of the policy of laissez faire and balanced budgeting, fluctuations in unemployment are likely.

Application to Underdeveloped Countries

It is under the influence of such an analysis that attempts have been made to apply the Keynesian economics to underdeveloped countries, the assumption being the need to increase the purchasing power in the hands of the people for generating the required economic growth. Thus deficit financing, created money, and cheap money policies have been used in these countries as well as in the industrialized countries.

In underdeveloped countries, there is a predominantly agricultural economy; the number of workers employed on a wage is comparatively small, the vast majority of earners falling under the category of household enterprises; production is largely for home consumption rather than for the external market; capital equipment is low and the technological level is almost primitive. Under these circumstances, the Keynesian multiplier

principle does not work. Dr. V. K. R. V. Rao has discussed this problem and one may summarize his conclusions as follows:[1]

1. When an increase in I causes an increase in Y and N, a second increase in I is to come from a secondary increase in Y, N and output in the consumption goods industries until $\Delta Y = k\Delta I$ and $I = S$ in the economy. But in an underdeveloped country--where MPC and k are high--secondary increases in Y, N and output do not take place.

2. The supply curve of agriculture in the underdeveloped countries is not only inelastic but tends also to be backward rising. This implies that an increase in the price of output may not necessarily lead to a subsequent increase in the volume of production.

3. Due to rigidities offered by the economic organization, the primary producers cannot increase their output in proportion to their income. Therefore, one may say that the income multiplier is higher in money terms than in real terms.

4. Since the MPC is high, the major portion of the increased income would be spent on consumption goods, which will decrease surplus of food grains in the market. This will have a serious repercussion on non-agricultural prices. Thus, the forces operating in the underdeveloped economies lead neither to high Y nor to higher N.

5. With disguised unemployment, secondary effects of an initial increase in primary N caused by an initial increment of I do not often follow. This is because there is no labor force willing to accept N at the

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[1]V. K. R. V. Rao, "Investment, Income and the Multiplier in Underdeveloped Economy," in The Economics of Underdevelopment, edited by A. N. Agarwala and S. P. Singh (New York: Oxford University Press, 1963), pp. 205-218.

current wage or any involuntarily unemployed because of the lack of N opportunities.

According to Dr. Rao, for the multiplier principle to work, there must exist the following:[1]

(a) Involuntary unemployment.

(b) An industrial economy where the supply curve of output upward sloping to the right.

(c) Excess capacity in the consumption-goods industries.

(d) Comparatively elastic supply of the working capital required for increased output.

These assumptions do not hold in underdeveloped economy for the following reasons:

(a) An underdeveloped country takes the form of disguised unemployment rather than of involuntary unemployment.

(b) An agricultural economy where the supply curve is not only inelastic but also tends to be backward rising.

(c) The absence of excess capacity in consumption-goods industries, coupled with a comparatively inelastic supply of the working capital needed for increasing production.

For the reasons mentioned above, the Keynesian multiplier principle does not appear to operate in regard to the problem of diminishing unemployment and increasing output in underdeveloped countries, an increment of I based on deficit financing tending to lead more to an inflationary rise in prices than an increase in output and N.

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[1]*Ibid.*, p. 212.

CHAPTER VI

CAPITAL FORMATION

The Role of Capital Formation

Many economists emphasize capital accumulation as the major factor in the theory of economic development. Professor Rostow, for example, explicitly specifies a rise in the rate of productive investment to over ten per cent of national income as a necessary requirement for a country's take-off.[1] Professor Lewis emphasizes that:

> The central problem in the theory of economic development is to understand the process by which a community which was previously saving and investing 4 or 5 per cent of its national income or less, converts itself into an economy where voluntary saving is running at about 12 to 15 per cent of national income or more. This is the central problem because the central fact of economic development is rapid capital accumulation (including knowledge and skills with capital).[2]

Vicious Circles of Poverty

In underdeveloped countries, inefficient utilization of the existing labor supply in relation to the capital stock and natural resources is more complicated than the kind of Keynesian unemployment. In the Keynes theory of S = I, in order to raise the level of S, more and more I is necessary. But in underdeveloped countries, per capita real income is very low. Therefore, only a small S is possible which causes a low I and low capital

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[1] W. W. Rostow, The Stages of Economic Growth: An Anti-Communist Manifesto (New York: Cambridge University Press, 1960) Reprinted in G. M. Meier Leading Issues in Development Economics (New York: Oxford University Press, 1964), pp. 16-17.

[2] W. A. Lewis, "Economic Development with Unlimited Supplies of Labor," The Manchester School, May, 1954, reprinted in The Economics of Underdevelopment, edited by A. N. Agarwala and S. P. Singh (New York: Oxford University Press, 1963), p. 416.

formation. This is what is known as a 'vicious circle of poverty'. This circular relationship prevails on both the supply and demand sides of the problem of capital formation. The supply of capital is conditioned by the ability and willingness to save, while the demand for capital by the incentives to invest.

(a) On the supply side, the low level of real income generates a small capacity to save and invest. This low real income is due to a low productivity caused largely by the lack of capital resulting from a small capacity to save and to invest, and so the circle is complete.

(b) On the demand side, the inducement to invest is low in the economy because of the low purchasing power of the people caused by their low real income: a result of low productivity. The low level of productivity, however, is mainly an outcome of the small amount of capital used in production, which in its turn is caused at least partly by the small inducement to invest. Therefore, the low level of real income reflecting low productivity in the economy is a point common to both circles.[1]

In underdeveloped countries, not only is the capital stock extremely small, but the current rate of capital formation is also very low. India and Pakistan, for example, gross investment is only 6 per cent or 7 per cent of gross national product, and in Indonesia only about 5 per cent,[2] whereas in the United States, Canada, and Western Europe it is about 15 to 18 per cent.

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[1]R. Nurkse, Problems of Capital Formation in Underdeveloped Countries (New York: Oxford University Press, 1953), pp. 4-5.

[2]W. W. Rostow, "The Take-Off into Self-Sustained Growth," Economic Journal, March, 1956, reprinted in A. N. Agarwala and S. P. Singh (eds.) The Economics of Underdevelopment (New York: Oxford University Press, 1963), p. 170.

Thus one may say that the final goal of development programing is to find the best way of breaking the vicious circle between capital shortage and underdevelopment and to design the most efficient and optimum rate of capital accumulation.

Keynes and Capital Formation

The requirement of capital accumulation cannot be met by creating financial institutions and by Keynesian monetary expansion. A strong financial structure is important in influencing the mobility and allocation of capital and in channeling S into productive I, but the existence of channels of finance does not guarantee an increase in the level of capital formation. Without additional real S, Keynesian monetary expansion would lead to inflation. As Professor Nurkse had pointed out that:

> It is a matter of common observation that in the poorer countries the use of capital equipment in the production of goods and services for the domestic market is inhibited by the small size of that market, by the lack of domestic purchasing power, not in deficiency of monetary but in real terms, in a sense to be presently defined. If it were merely a monetary demand, it could easily be remedied through monetary expansion; but the trouble lies deeper. Monetary expansion alone does not remove it, but produced merely an inflation of prices.[1]

Because of the low rate of capital formation, the rate of I is low. At the current rate of S, the rate of I is further kept low by a low MEC. The cause of a low MEC in these countries is not in the direction of Keynes but rather in the direction of J. B. Say. As Professor Nurkse has shown that if the curve of MEC has to be raised, what is needed is a simultaneous development of a number of industries, the supply of goods in one creating

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[1]Nurkse, op. cit., reprinted in S. S. Tangri and H. P. Gray (eds.) Capital Accumulation and Economic Development (Boston: D. C. Heath and Co., 1967), p. 64.

demand for goods in others.[1] And this involves an expansion in the aggregate stock of capital resources. The limiting factor in the growth of employment in underdeveloped countries is not a shortage of money but a shortage of real capital. An increase of capital resources will make possible a simultaneous development of industries.

In underdeveloped countries, capital formation may be partly effected by mobilizing the forces latent in disguised unemployment and surplus agricultural labor. A relationship between C and I, which stands midway between classical and Keynesian approaches is needed. In the classical model, an increase in the rate of capital formation necessitates a reduction in C. In the Keynesian model, both C and I can be expanded at the same time. In the underdeveloped countries, the situation is different from the Keynesian model in the sense that when population is fast increasing, it is difficult to expand both C and I at the same time. But if there can be an economic reorganization through the general mobilization of the agricultural surplus labor, it is possible to increase capital formation without having to cut down the level of C.[2] Since disguised unemployment in overpopulated agricultural countries is said to contain a hidden source of S available for economic development, additional real national income may be created if the surplus people are taken away from agriculture and made to produce anything elsewhere to help capital formation. It is this approach rather than the Keynesian one that may provide a solution of the fundamental problems of development in an underdeveloped country. This process needs to develop a new dynamic approach which is capable of dealing with the

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[1]Nurkse, op. cit., pp. 13-14.

[2]Ibid., p. 38.

changes in the long-run supplies of factors of production and changes in the techniques of production involving the transformation of the whole organizational structure of the underdeveloped economies.

CHAPTER VII

EPILOGUE ON POST-KEYNESIAN GROWTH THEORIES

Although Keynes' General Theory revolutionized the theory of business fluctuations, it was confined to short-period analysis. Since Keynes did not concentrate on the long-run problems, it is presented in a static analytical framework in which he assumed the following elements as given and constant: "... the existing skill and quantity of available labour, the existing quality and quantity of available equipment, the existing technique, the degree of competition, the tastes and habits of the consumer..."[1]

Post-Keynesians, however, are attempting to extend the Keynesian system into a more comprehensive long-period theory of output and employment which analyzes fluctuations in a long-run setting of economic growth. Those economists who are attempting to formulate a dynamic extension of the Keynesian system have provided the most recent contributions to the theory of growth. In this analysis the central questions are: What are the requirements to maintain a stable growth of full employment income without inflation or deflation? And will income actually grow at such a rate so as to prevent secular stagnation or secular inflation?

The two individuals who did the most in developing Keynesian static theory into a dynamic growth theory are R. Harrod and E. Domar. These economists, like Keynes, were concerned primarily with the growth problem of developed countries. However, the simple growth model they built has been widely used in underdeveloped countries, both for forecasting the development rate and for specifying the saving requirements for particular per capita

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[1]J. M. Keynes, General Theory, p. 245.

income growth targets.

Harrod's Growth Model

Harrod's interest was in the question of what are the conditions necessary to maintain the stable growth of advanced capitalism.[1] In Harrod's growth theory, a basic condition of stable growth is that net national real income (Y) must increase by the same amount as productive capacity, when the saving ratio (s) and the capital-output ratio (b) are given:

$$\Delta Y = s/b.Y$$

The right-hand side of the equation is an increment of productive capacity and the left-hand side is an increment of effective demand. From this equation, it follows the familiar required rate of growth of income (in Harrod's terminology: 'warranted' rate of growth):

$$\Delta Y/Y = s/b$$

which tells one that income must grow at the constant rate s/b if productive capacity is to be fully utilized without excess or short capacity.

Domar's Growth Model[2]

Domar spells out the Keynesian multiplier aspect of the demand side while Harrod does not. On the supply side, Domar differs from Harrod

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[1]R. F. Harrod, "An Essay in Dynamic Theory," *Economic Journal*, March, 1939, XLIX, pp. 14-33; *Towards a Dynamic Economics* (London: Macmillan and Co., Ltd., 1948); "Supplement on Dynamic Theory," in *Economic Essays* (London: Macmillan and Co., Ltd., 1952).

[2]E. D. Domar, "Capital Expansion, Rate of Growth and Employment," *Econometrica*, April, 1946, XIV, 137-147; "Expansion and Employment," *American Economic Review*, March, 1947; and "Theoretical Analysis of Economic Growth," *American Economic Review*, Papers and Proceedings, May, 1952. All reprinted in *Essays in the Theory of Economic Growth*, (New York: Oxford University Press, 1957).

mainly in using the reciprocal of the latter's capital-output ratio, that is, in using the productivity of investment. His model can be expressed as follows:

(1) $\Delta Y = \Delta I/\alpha$ (on the demand side)

(2) $\Delta Y' = \sigma \Delta K = \sigma I$ (on the supply side)

(3) $\Delta Y = \Delta Y'$ or $\Delta I/\alpha = \sigma I$ (Equilibrium condition)

(4) $r = \Delta I/I = \alpha\sigma$ (Growth rate of investment)

where Y = the level of net national income or effective demand.

Y' = the level of productive capacity or supply at full employment

I = net investment

K = real capital

α = the marginal propensity to save

σ = the productivity of capital or of net investment

r = required rate of growth of net investment for a full employment equilibrium

This system tells one that, given a constant α and constant σ, net investment will have to grow at the rate r or $\alpha\sigma$, if the demand and supply side of a growing economy are to be balanced so as to maintain the state of full employment indicated by Equation (3). In sum, the economy must satisfy the condition indicated by Equation (3) in order to achieve full employment.

Domar's growth model $\Delta I/I = \alpha\sigma$ comes to the same thing as Harrod's growth model, since from $Y = I/\alpha$ one gets

$$\Delta Y/Y = \frac{\Delta I/\alpha}{I/\alpha} = \Delta I/I = \alpha\sigma = s/b \qquad (\alpha = s,\ \sigma = 1/b)$$

Singer's Growth Model

Professor Singer put the growth rate of population into the equation

to convert G from the rate of growth in total income to the rate of growth in income per capita.[1] By using Professor Singer's model--which is a Harrod-Domar type of analysis--one may write the rate of economic development equation in algebraic terms

$$G = s/b - n$$

where G = the rate of growth of per capita income or the rate of growth of economic development.

s = the rate of savings out of national income (S/Y).

b = the capital-output ratio (K/Y).

n = the rate of growth in the labor force or the growth rate of population ($\Delta N/N$).

From this formula, one may have three types of economies as follows:

(a) If $s/b - n > 0$, then $G > 0$; Progressing economy

(b) If $s/b - n = 0$, then $G = 0$; Stationary economy

(c) If $S/b - n < 0$, then $G < 0$; Regressing economy

This example indicates that the rate of growth of economic development can be increased by increasing the saving ratio, decreasing the capital-output ratio or decreasing the growth rate of population. These parameters can be explained as follows:

1. There are two sources from which underdeveloped countries may attain increases in s: internal and external sources. From internal sources, an increase of savings may be generated voluntarily through a reduction in consumption; involuntarily through additional taxation, compulsory lending to the government, or inflation; or by taking underemployed

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[1] H. W. Singer, "The Mechanics of Economic Development," Indian Economic Review, August, 1952. Reprinted in A. N. Agarwala and S. P. Singh (eds.), The Economics of Underdevelopment, (New York: Oxford University Press, 1963), pp. 381-399.

labor into productive work.[1] From external sources, the financing of development may be met from the investment of foreign capital, restriction of consumption imports, or an improvement in the country's terms of trade.

2. To achieve a decrease in b, an underdeveloped economy would have to increase the productivity of capital by making capital-saving technological improvements as well as by avoiding the wasteful use of plants and equipment. A reallocation of capital to the more productive sectors could decrease b for the whole economy.

3. To decrease n by taking s/b as given, an underdeveloped country must decrease the ratio of incremental population to available labor. Birth control and other demographic experiments may be used to reduce the ratio of the increment in population to available labor. And this would include the encouragement of emigration.[2]

Singer's growth model is often applied to forecasting and planning in underdeveloped countries. His analysis may help to answer the following important four different questions:[3]

1. What is the possible rate of development?

2. What net savings are necessary to support the rate of development?

3. What must the productivity of new investment per unit of capital employed be?

4. What rate of population increase can be supported?

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[1]G. M. Meier, (ed.) Leading Issues in Development Economics (New York: Oxford University Press, 1964), p. 114.

[2]K. K. Kurihara, The Keynesian Theory of Economic Development (New York: Columbia University Press, 1959), p. 117.

[3]Singer, op. cit., p. 397.

The answer to all these questions can be obtained by substituting parameters--assume that G = 2%, s = 6%, b = 5:1, n = 1.25%--into the question as follows:

1. If s = 6%, b = 5:1, n = 1.25%, then G = -0.05%. There will be no improvement in per capita income, and no economic development by means of investment is possible. The economy is stationary economy.

2. If G = 2%, b = 5:1, n = 1.25%, then s = 16.25%. This means that in order to have a rate of development of 2% per annum, a rate of s must increase 16.25%.

3. If G = 2%, s = 6%, n = 1.25%, then b $<$ 2:1. This means that, given the target rate of economic development 2%, the productivity of investment per unit of capital must be increased by 54%.

4. If G = 2%, s = 6%, b = 5:1, there will be no increase in population can be supported. Development at the stipulated rate would only be possible in a society of stationary population.

Balanced versus Unbalanced Growth

In considering the decisions concerning resource allocation to promote economic development in underdeveloped countries, the question arises as to whether growth should be balanced or unbalanced.

1. Balanced growth. Economists like Rosenstein-Rodan and R. Nurkse[1]

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[1]P. N. Rosenstein-Rodan, "Problems of Industrialization of Eastern and South-Eastern Europe," Economic Journal (June-September, 1943), pp. 202-211; and R. Nurkse, "Some International Aspects of the Problem of Economic Development," American Economic Review (May, 1952), pp. 571-583. Both reprinted in A. N. Agarwala and S. P. Singh (eds.) The Economics of Underdevelopment (New York: Oxford University Press, 1963), pp. 245-255 and 256-271; and R. Nurkse, Problems of Capital Formation in Underdeveloped Countries (New York: Oxford University Press, 1953).

lay great stress on the need for simultaneous investment in many sectors as a means of breaking a "vicious circle of poverty" and stimulating economic development. Nurkse defines "balanced growth" as an attack on a wide front of poverty which expands productivity and income in various industries which will create wide markets for goods produced.[1] He argues that lack of markets and deficiency in demand constitute the basic factors responsible for slow growth. It is pointed out that by making investments in varied fields of enterprise it would be possible to raise the level of demand and expand internal markets. The growth of one industry helps the development of others in two ways: (a) it may supply raw materials required by other industries; (b) by providing employment it helps increase in demand for the products of other industries so that the starting or expansion of other industries would become worthwhile. The result will be all-round economic expansion.

2. Unbalanced growth. Other economists recommend that the proper investment policy in underdeveloped countries should be to concentrate on a few sectors or industries which have great growth potentialities. Thus, Paul Streeten, A. O. Hirschman and W. W. Rostow[2] recommend unbalanced growth, i.e. increase in investment and production to be concentrated in a few sectors. In any economy of a country some industries may be expanding while others remain stationary or contract. The expanding industries require funds to finance their growth, while the industries which are stagnating

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[1]Nurkse, _ibid_., chap. 1.

[2]Paul Streeten, "Unbalanced Growth," _Oxford Economic Papers_ (June, 1958); A. O. Hirschman, _The Strategy of Economic Development_ (New Haven: Yale University Press, 1959); and W. W. Rostow, _The Stages of Economic Growth: An Anti-Communist Manifesto_ (New York: Cambridge University Press, 1961).

will have unused resources. The former are the borrowers and the latter are the lenders. If the capital intensity of the expanding industries is greater than the stationary or contracting industries, then aggregate investment will exceed savings and it will promote economic growth. Public utilities, transport, steel industry, irrigation, hydro-electric projects, etc. are examples of capital-intensive industries.

In unbalanced growth precedence may be given to industry over agriculture. It is argued that investment in industry without waiting for the primary (agricultural) sector to expand sufficiently would provide an expanding market for industrial materials and would thereby promote the development of agriculture. Furthermore, development of industry should lead to the building up of economic overhead capital which would have a beneficial effect on the all-round expansion of the economy. Recommendations about development of this nature are based on the presumption that free private markets would not lead to the optimal allocation of resources over time.

In the historical examples which Rostow has given,[1] concentration on the development of a few industries or sectors was helpful to economic growth. This is because the availability of one or two industries results in excess of production in certain lines and deficiency of supply in relation to demand in other sectors which can be set aright only by means of foreign trade. The modern argument for concentration of unbalanced growth is based on the scope for economies of scale which such a method of development would generate.

However, it is possible that the full benefit of economies of scale cannot be reaped because of insufficient effective demand for the products,

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[1]Rostow, <u>ibid</u>., p. 66.

or because of insufficient savings to meet the investment requirements of expansion. In such a situation it would be necessary to keep a balance between economies of scale and balanced growth. Sacrifice of external economies would reduce the rate of growth but balanced development would ensure an element of stability in the economy.

CHAPTER VIII

CONCLUSIONS

Although Keynesian economics was developed primarily in advanced industrialized countries and does not appear to be fully applicable in the context of underdeveloped countries, there is an increasing possibility of its application because the underdeveloped countries are becoming developed. In other words, the *General Theory* is a theory of developed countries and as such would automatically be applicable when these countries have developed.

Moreover, Keynesian economic framework of macroeconomic variables and their analysis can be a very useful tool for underdeveloped countries. The general relationships between flows of money and of goods are the same in underdeveloped countries as they are in advanced ones; it is a matter of selecting the right institutional assumptions.[1] As Bauer and Yamey pointed out that:

> There are no special economic theories or methods of analysis fashioned uniquely for the study of the underdeveloped world. But while the tools of analysis are of wide relevance, in a study of underdeveloped countries the situation to which they must be applied vary greatly.[2]

And one of the recent contributors reminds people that they should not throw the baby away with the bath-water[3] and that some of the Keynesian basic

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[1]B. Higgins, *Economic Development: Principle, Problems and Policies* (New York: W. W. Norton and Co., Inc., 1959), p. 292.

[2]P. T. Bauer and B. S. Yamey, *The Economics of Underdeveloped Countries* (Chicago: University of Chicago Press, 1957), p. 8.

[3]A. Mathur, "On 'Throwing the Baby Away with the Bath-Water': An Essay in the Defence of Keynesism in Relation to the Underdeveloped Countries," *Indian Economic Journal*, April-June, 1965, pp. 397-416.

propositions and techniques of analysis have applicability to the context of underdeveloped countries.

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KEYNESIAN ECONOMICS AND UNDERDEVELOPED COUNTRIES

by

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The main purpose of this report is an attempt to examine some important points relating to the applicability of the Keynesian economic analysis in the context of underdeveloped countries. Some of the important conclusions brought out in this report may be summarized as follows:

1. The technical Keynesian ideas deal with the economics of full employment. It is static analysis of given population, technology, tastes, capital, and people's preferences for work and goods versus leisure. In the underdeveloped countries, the problem is all-round economic development which involves changes of some fundamental variables in the economic system. Thus the explanation of the process of development and its nature has to be done in terms of economic dynamics.

2. Keynes was concerned with the problem of involuntary unemployment in advanced industrialized countries, which he argued was due to insufficiency of effective demand. But in underdeveloped countries it is disguised unemployment which arises from the deficiency of capital which is the major problem.

3. Underdeveloped countries are predominantly agricultural economies; capital equipment is low and the technological level is almost primitive; production is largely for home consumption rather than for market and so the market economy remains relatively underdeveloped. The consumption of capital is such that fixed capital plays a very unimportant role. Therefore, the Keynesian investment multiplier does not work in underdeveloped countries.

Keynesian economics was developed in a setting entirely different from that of the underdeveloped countries. Therefore, Keynesian policy recommendations may not be very helpful in the context of the underdeveloped countries.

Since the major employment problem in underdeveloped countries is disguised unemployment, what is needed most is not stimulus to total demand but economic development which requires major institutional changes and a large volume of saving to fund capital investment. It needs capital investment on a scale and of a type that will only be possible through joint efforts of the underdeveloped countries, and of those advanced countries able to provide large-scale capital assistance. This investment should be accompanied at first by improvements in techniques that are labor-absorbing rather than labor-saving. However, capital is not the only scarce factor in underdeveloped countries; managerial and labor skills are also in short supply. Both managerial and manpower skills might possibly be provided in the short-run by foreign experts, and by manpower training programs under technical assistance in the long-run.

Keynesian economics can be very useful even to underdeveloped countries because he introduced interest in aggregate problems such as the level of demand and employment, growth of income, etc. His tools of economic analysis (such as marginal propensity to consume, multiplier, marginal efficiency of capital, liquidity preference and many more) have applicability to any type of economy. It is on the basis of Keynesian concepts that modern models of economic growth are constructed and with the help of Keynesian tools of analysis the process of change and growth may be better understood.