DYNAMICS OF WORLD ECONOMIC DEVELOPMENT

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Abstract

Each of us is solitary. Each of us dies alone. That is a fate against which we cannot struggle, but there is plenty in our condition which is not fate, and against which we are less than human unless we do struggle.

The people in the industrialized countries are getting richer, and those in the non-industrialized countries are at best standing still: the gap is widening every day. Industrialization is the only hope of the poor. Health, food, education; nothing but industrialization could have made them available to the very poor.

Economists are inclined to be impatient in attempting to ameliorate this social condition; and are inclined to think that it should be done. The lessons which the present underdeveloped countries can learn may lie as much in the past as in the contemporary history of their developed forerunners.

Such common problems as capital accumulation, economic diversification, balance of payments, technological development, population, labour, employment, land distribution, colonialism, dualism or pluralism, political affairs and social ideology are of importance. However, what are absolutely necessary are systematic comparisons of the processes of economic growth and of the economic structures of different countries by linking non-economic
factors to the structure of modern economics. Thereby it will be possible to clarify the character of the process of economic growth and to disclose the relative importance of the various factors.

Without over-simplification, dynamic theory can be divided into two categories; economic dynamic approach and sociological institutional approach. No "dynamics of world economic development" is as simple as to be fully explained by one of these approaches.

As a result of the inevitable process being a synthetic theory from different opinions founded on different bases, the theory of Professor Walt Whitman Rostow must be considered. It seems that his theory is cogent, and successful in establishing a sequence of cause and effect in the field of economic growth.

A matter of factual history observed in the light of economics is fully discussed by using illustrations of sixteen countries in the world. The process of economic development is ascertained. The dynamics of Professor Rostow indicates the ways of mollifying the dangerous characteristics of the Union of Soviet Socialist Republics, of coping with the vast number of underdeveloped countries, and of clarifying the meaninglessness of Marxism. Here, our social hope can find the basis on which policies should be dependent.
The trick of getting rich is no secret and the world cannot survive half rich and half poor.
CONTENTS

:: Abstract
:: Acknowledgement
I. Introduction
   --Purpose of the Study
   --Method of Treatment
II. Emergence of "Dynamic" Theory
   1. Identification of Problems
   2. Dynamics in Economic Theory
   3. Institutionalism and Sociological Considerations
   4. Professor Rostow's Formulation of Conclusions from the above
III. The Theoretical Basis of Professor Rostow's Interpretation
   1. The Basic Theory
   2. The Process of Development
   3. Illustrations from Various Countries
IV. The Application of Professor Rostow's Interpretation
   1. Policy Views
   2. Criticism of the Marxian Standpoint
V. Conclusions
   --Prognosis
:: Bibliography
The separation between Canada and Japan is much more bridgeable today than it has ever been. Still, on the one hand, it is all very well for Canadians, in their complacency, to think that material standards of living are of minor consequence. On the other hand, it is evident that the Japanese are not eating better than at the subsistence level and are at present working harder than Canadians.

Dean Geoffrey C. Andrew extended to me the very generous offer of coming to Canada. Living in a foreign country imposes many new hardships, yet I shall always call to mind the experiences of these two years with the most pleasant memories.

Professor John J. Deutsch decided my whole programme at the University of British Columbia. His guidance made my post-graduate studies substantial.

Dr. Joseph A. Crumb afforded me the most enjoyable one-to-one lectures for a year.

Dr. E. Stuart Kirby did everything to enable me to complete this thesis. With a deep understanding of both Japanese and English patterns of thought, he checked every single word in this work. His kindness was of major importance to my thesis.

Dr. Robert M. Clark was the professor from whom
I learned about the Canadian economy.

Dr. Robert M. will added stimulus to my work. I appreciated his patience with me, as I fulfilled the mere requisites of a poor student for one year and of a poor assistant for another.

Mr. A. Milton Moore took the leadership in our seminar and never failed to comment on our reports.

Dr. John S. Conway proved to be an inspiring lecturer to whom no one could listen disinterestedly. His benevolence is one of the things which I will not easily forget.

Professor Ronald P. Dore had been helping me all along. Thanks to his profound comprehension of Japan, I did not fall behind during these two years.

There is no excuse for my not knowing the difference between Canada and Japan. The first task is for me to save the poor from poverty.

T. K.

Acadia Camp, U. B. C.
April 1960
CHAPTER I.
INTRODUCTION

---Purpose of the Study
---Method of Treatment

"There is no way of studying social reality other than from the viewpoint of human ideals. A 'disinterested social science' has never existed and, for logical reasons, cannot exist. The value connotation of our main concepts represents our interest in a matter, gives direction to our thoughts and significance to our inferences."

---Gunnar Myrdal
I. Introduction

--- Purpose of the Study

--- Method of Treatment

For better or for worse, recent developments of economic growth theory have tended to shift discussion of "dynamics of world economic development" from broad deliberation by social scientists to the specific assessments by practical technicians.

There are five reasons why this thesis is to be written:

First: systematic comparison of the course of economic growth and of the economic structure of different countries at varying stages of their development is needed to understand the process of economic growth and to assess the importance of the factors which accelerate or retard economic growth.

Second: there is a pronounced dearth of systematic thorough studies of comparative economic growth and structure, although a large amount of work has been and is being done by individual scholars, by research institutions, and by governments.

Third: it is necessary to have an effort to link non-economic factors to the structure of modern economics, and, primarily, the economic aspects of economic growth and structure and the effects of noneconomic
factors on economic life must be considered.

Fourth: the main contribution which economists seem to be able to make is to clarify the character of the process of economic growth and to lay bare the relative importance of the various factors which accelerate or retard it, because the areas most important for understanding the process of economic growth and differences in economic features among countries are likely to be those that are most significant from the point of view of economic policy.

Fifth: the main lessons which the underdeveloped countries of today can learn from the more developed countries may lie as much in the early as in the contemporary history of forerunners.

Starting with the consideration of the problems of "dynamic" theory, it becomes clear that there have been two approaches to "world economic development."

However, neither the economic dynamic approach nor the sociological institutional approach is more cogent than the theory of Professor Walt Whitman Rostow.

"What oft was thought,
but ne'er so well expressed."

In Chapter II, the main trend of dynamic theory is traced to throw a new light on Professor Rostow's theory.
characteristic of the new theory might be understood from a deeper perspective.

The theoretical basis of Professor Rostow's interpretation is analysed in Chapter III which consists of three sections: ideological, theoretical and practical. "No more calamitous notion than that abstract economics was economics proper." A matter of factual history seen in the light of economics is fully discussed. Although many economists have felt dissatisfied with the deductive basis of dynamics, serious attempts to get to grips with the facts of world economic development have seldom been successful. What must be done is to establish a sequence of cause and effect in the field of economic growth.

Chapter IV is devoted to the application of Professor Rostow's dynamics. In 1960, every educated, decent, intelligent son of Western civilization is facing three massive problems: the Union of Soviet Socialist Republics, the underdeveloped countries and Marxism. Not only to save the world, but also to save our own souls, we desperately need theoreticians based on facts, planners based on theories, and fighters based on policies, who would take upon themselves important social functions in democracy.
Practically, the world is ruled by the ideas of economists.

"The promotion of knowledge is the most powerful policy."

Here, I would like to get the facts straight and think things out stringently to make known a new dynamics of world economic development.
CHAPTER II.

EMERGENCE OF "DYNAMIC" THEORY

1. Identification of Problems
2. Dynamics in Economic Theory
3. Institutionalism and Sociological Considerations
4. Professor Rostow's Formulation of Conclusions from the above

"Our trouble is not ignorance. It is just that we know so many things that are not true."

---Josh Billings
II. Emergence of "Dynamic" Theory

Making a systematic firsthand survey of "dynamic" theory requires a great deal of work because as one of the growing theories, dynamic theory consists of an enormous number of arguments among American-British economists and Continental economists, Harvard School and Chicago School, and economists who belong to international organizations such as the United Nations, and free lancers. As a matter of fact, it is a mêlée involving hundreds of theorists and practical men. I would like to summarize the discussions concerning dynamic theory to deduce a striking characteristic of Professor Rostow's theory.¹

1. Identification of Problems

After World War II, the American position in the world economy had drawn great interest from economists. In 1947, the Council on Foreign Economic Relations and the Twentieth Century Fund elaborated a study of America's role in foreign trade and investment. Norman S. Buchanan of the University of California and Friedrich A. Lutz of Princeton University published "Rebuilding the World Economy."² The Council on Foreign Economic Relations was

¹ This is not a comprehensive survey of dynamic theory. What I will do here is to trace the main trend of the theory and throw a new light on Professor Rostow's theory.
² Norman S. Buchanan & Friedrich A. Lutz, Rebuilding the World Economy; America's Role in Foreign Trade and Investment, New York, Twentieth Century Fund, 1947.
organized by seven members, including Winfield W. Fiefler of Princeton University as the chairman, Winfield W. Bidwell of the Council on Foreign Relations, and Paul G. Hoffman who was the president of the Studebaker Corporation as well as the chairman of the Committee for Economic Development.

The main purpose of the Council was to reconsider American foreign economic policy. Finally, they brought forward a recommendation on multilateral trade and reconstruction of the world economy with special emphasis on elimination of international economic unbalance by international capital movement. Also, in connection with the strong influence of changes in the American domestic economy on the world economy, they advocated some domestic economic policies, such as the establishment of a buffer stock system with respect to raw materials which could be reserved, and the abolition of tariff barriers to increase imports.

Afterwards, Norman S. Buchanan wrote a book, "Approaches to Economic Development" with Howard S. Ellis of Harvard University. Thus he contributed a great deal to the pioneering field of dynamic theory. His approach was very practical and political, because of his previous career in journalism.

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Previously in 1945, Alvin H. Hansen analysed the fundamental inequality of the world economic structure in his work, "America's Role in the World Economy." In the works of both Norman S. Buchanan and Alvin H. Hansen, we find a strong element of Keynesian thought. At that time, Cleona Lewis wrote "The United States and Foreign Investment Problems," in which she broke down the effects of foreign investment on international and national economies.

On the other hand, without any connection with modern economics, the type of study which analysed the social economic structure of underdeveloped countries as such, had been carried on mainly in the United Kingdom and the Netherlands whose colonies presented problems not only to their mother countries but also to the world economic development. Julius H. Boeke of the Netherlands, who had continued an enormous amount of research on Indonesian society since 1910 and had advocated the 'dual economy' theory, wrote "The Interests of the Voiceless Far East; Introduction to Oriental Economics" as a stepping stone to his following rich volume: "Economie van Indonesië" in 1953. Its English version, "Economics

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5 Alvin H. Hansen, America's Role in the World Economy, New York, Norton, 1945.
8 Julius H. Boeke, Economie van Indonesië, Haarlem, vierde herziene druk, 1953.
and Economic Policy of Dual Societies as Exemplified by Indonesia," appeared in the same year.⁹ Deriving suggestions from Julius H. Boeke's theory, John S. Furnivall published a series of works, in 1939 "Netherlands India; A Study of Plural Economy,"¹⁰ in 1941 "Progress and Welfare in Southeast Asia; A Comparison of Colonial Policy and Practice,"¹¹ and in 1948 "Colonial Policy and Practice; A Comparative Study of Burma and Netherlands India."¹² Nowadays he makes an effort to analyse the political and economic situation of Burma.¹³ A professor of Oxford University, Sally H. Frankel, who was born in the Union of South Africa and graduated from the London School, had been continuing his work on South Africa and built up the foundation of his 'multiracial society' theory.¹⁴

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¹¹ John S. Furnivall, Progress and Welfare in Southeast Asia; A Comparison of Colonial Policy and Practice, New York, 1941.


Hence, after 1948 "dynamic" theory has, roughly speaking, been developed dualistically; one is the economic dynamic approach that, having its start in the traditional theory of economic development, is primarily concerned with economic adjustment through an international capital movement, and another is the sociological institutional approach which originated from studies of the social structure of underdeveloped countries.

The economic dynamic approach had its basis in the thoughts of classical economists, Adam Smith, Thomas R. Malthus, and Giovanni Botero, and has been brought up in the field of economics as a theory dealing with economic development and growth as well as the population problem. In this category, we might include all such distinguished theories as the followings: Adam Smith's formulation of development with natural harmony, the pessimistic population theory of Thomas R. Malthus, David Ricardo's theory of extinction of investment incentive and international specialization based upon comparative costs, Karl H. Marx's philosophy of revolutionary development which is founded on historical materialism, Alfred Marshall's trade cycle theory and formulation of economic

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15 Giovanni Botero was an Italian predecessor of anti-mercantilists. In his book, Delle cause della grandezza e magnificenza delle città, 1589, he compared the unlimited generative powers of human beings with the limited productive powers of land.
development without harmony, Joseph A. Schumpeter's theory of dynamic growth, and J. Maynard Keynes' theory of imperfect employment and theory of secular stagnation.

The sociological institutional approach has arisen from the study of the social structure of colonies which was necessary for colonial administration. It includes not only Sally H. Frankel's idea of 'economic impact' on underdeveloped society, Julius H. Boeke's theory of 'dual economy,' John S. Furnivall's 'plural society' theory and Rupert Emerson's pessimistic interpretation of backward society, but also Bert F. Hoselitz' consideration of environmental conditions in underdeveloped countries, and Charles Wolf's institutionalism, to which I shall refer later. This approach is lacking in synthetic theoretical system, but is worthy of attention.

These two approaches have originated separately, not only from the historical difference in theoretical background, but more important, from the difference of problems which economists have discussed with special emphasis. Here I would like to set forth all our major questions:

(i) Problem of capital accumulation and economic diversification

--which contains such problems as under-saving, hoarding of gold, silver and gems,
shortage of productive investment opportunities, imperfection of the banking system, and usury.

(ii) Problem of balance of payments
---which mainly means price instability of primary products, therefore it implies fluctuation of foreign reserves, deficit in trade balance and deterioration of terms of trade.

(iii) Problem of technological development
---which indicates lack of skilled workers, operators, entrepreneurs, and low level of productivity.

(iv) Problem of population, labour and employment
---which means over- and under-population, emigration, and disguised employment.

(v) Problem of land distribution
---which implies land reform.

(vi) Problem of inheritance from colonialism and of dual or plural society
---which includes imperfection of governmental bureaucratic organizations, illiteracy, provincialism, conventionalism, lack of co-operative spirit and lack of will to work.

(vii) Problem of political affairs and ideology
which comprises political instability, ideological conflict, backwardness of political parties and trade-unionism.

In fact, among these problems are some which do not cause any trouble in certain countries; and sometimes they appear in different forms. (i) and (ii) are economic problems, (vi) and (vii) are political social problems, and (iii), (iv) and (v) belong to both categories, economic and social. Fundamentally, the economic dynamic approach deals with the fields from (i) to (v), and the sociological institutional approach analyses the points from (iii) to (vii).

The problems of population and land are the oldest questions in economics. Particularly, the population problem has recently made tremendous strides in its dynamic analysis and statistical consolidation through contributions of the United Nations, demographers, and statisticians. The real substance of the population problem lies in the consequence of an unceasing race between production and population, which was raised as an issue a hundred and sixty years ago by Thomas R. Malthus. In other words, it is a question of increase and decrease in per capita consumption. The so-called Harrod-Domar formula has been to some extent adopted as a tool to analyse economic development, and since then the argument concerning the
growth rate of the economy and the growth rate of population has been getting more and more heated. However, we should not ignore the fact that the population structure in a country, especially age distribution, is an absolutely important datum for forecasting the future employment situation and calculating fluctuation of productivity.

Economic Development" by the United Nations.  

The problems of capital accumulation and balance of payments are closely related with each other; on this a tremendous number of arguments have been presented by a great many economists, whose motivations and propositions are so different, that the situations are surprisingly complicated. I should not enquire especially into them here, however, I should mention several the names of noteworthy scholars: Ragnar Nurkse, Jacob Viner, Hans W. Singer, Norman S. Buchanan, John H. Adler, Henry C.

Wallich,\textsuperscript{27} and Peter T. Bauer.\textsuperscript{28} Generally speaking, Ragnar Nurkse and Jacob Viner put importance on international economic factors, and, on the other hand, John H. Adler and Peter T. Bauer emphasize domestic factors such as domestic capital accumulation. In addition to these works, some publications of the United Nations\textsuperscript{29} have to be referred to.

As I will explain in detail afterwards, the theory of economic development is in considerable confusion at present, mainly because of unclarity about the purpose of the theory. The main question is, whether the purpose is industrialization of countries, rise in per capita income or increase in social welfare. The indispensable conditions for industrialization are not only favourable situations of labour, capital and land, but also soundness in the credit system, potentialities of domestic and international markets, existence of basic industrial facilities and promotion of progressive entrepreneurship. These


factors should always be applied first. At the same time, we must notice that industrialization is not necessarily the best way to raise national income per capita or to increase national welfare. It depends upon the growth needed, the proportion between population and land, or the relative difficulty of capital financing, and we may even imagine a case in which agriculturalization is more recommendable as a tentative measure. The problem of social welfare often comes into conflict with capital accumulation, from a short term view-point. Preference between them changes our point of view on various aspects; for instance, the population problem. Without a consciousness of purpose, we could not understand the substance of a problem.

After all, industrialization and raising per capita income aim to increase the social welfare of the inhabitants. Then we realize that dynamic theory has to be based on broad political, economic and social analyses, leading to the overall improvement of countries. It becomes completely necessary to analyse the economic development of each country separately, and we might say that general theoretical studies, of international capital movement and economic relationship among underdeveloped and developed countries, are not very cogent unless they have certain realistic backgrounds. But this does not
mean that sociological analysis can be dynamic theory. Dynamic theory is growing in the direction of a political-economic theory which is based upon all the ideas I have mentioned above. Our present dynamic theory is trying to analyse economic development by looking at societies from the inside.

2. Dynamics in Economic Theory

Among those economists who take the economic dynamic approach, we notice several schools. One of them is a school which is trying to establish dynamic theory by figuring out the purpose of economic development through consideration of international politics and economy. Beside Norman S. Buchanan, whom I mentioned before, are Eugene Staley of Stanford University, Raymond F. Mikesell, a specialist in the Middle East affairs, and several more who might be regarded as members of this school. Dynamic theory is such a changeful, varying subject, that it is quite dangerous to classify all the economists concerned with it. For instance, Norman S. Buchanan used to be an enthusiastic Keynesian, however, nowadays he is establishing a more general method. And I would like to say that even Raymond F. Mikesell, judging from his practical work in the diplomatic field of the Middle East and in editing the Middle East Journal, and his theoretical researches,
particularly about foreign exchange and balance of payments, is expected to establish a significant theory in the future.

Eugene Staley expresses his thought in his stimulating book, "The Future of Underdeveloped Countries." He begins to define basic human wants: a person wants an adequate living, a sense of security, a sense of freedom and participation, creative opportunities, a sense of belonging, and a sense of purpose. Successful development should be taken to mean:

"Within the developing country
1. Higher level of production and real income, widely shared.
2. Progress in democratic self-government, reasonably stable and at the same time responsive to the needs and wishes of the people.
3. Growth of democratic social relations, including broadly shared freedoms, opportunities for self-development, and respect for individual personality.
4. Less vulnerability to Communism and other totalitarianisms, by reason of foregoing.

In external relations
1. Growth of attitudes that make for a more peaceful world, and for freedom both from external oppression and from use of power to oppress others.
2. Growth of mutually beneficial international trade and investment.
3. Strengthening of the over-all resources of the free world and the collective defense capacity of free peoples against any aggression."

He analyses the development problem from a free world point of view and presents basic questions in a very clear-cut form. He thinks economic development means change in social institutions.

"Economic development is a massive problem in human education and social readjustment. We are least likely to go wrong when we think of it in these terms rather than as a problem in mechanical equipment and mechanical skills, important as these are." 32

He admits the importance of the sociological institutional approach from the beginning.

On the other hand, Maurice Dobb discusses the problem from a different angle. He regards economic development as a broad political and economic proposition, and stresses the superiority of socialistic planned economy. After studying Soviet economic development for years in the United Kingdom, he gave three lectures at the University of Delhi in India in 1951 on economic development. In these he analysed the motivations towards economic growth through three factors: division of the labour force, capital accumulation, and technological innovation, and indicated the diminishing trend of the rate of profit in capitalistic economy, as well as the superiority of the socialistic economy in coercive absorption of unemployment and in organizing the economy. Norman S.

Buchanan and Howard S. Ellis criticize his proposals about re-distributing farm population, slighting the light industry and utilizing the surplus labour force, as one-sided. He is a Marxist (or a typical Ricardian socialist) and most of the criticism of his interpretations is concerned with this aspect. However, aside from his one-sided ideology, his analysis has contributed considerably to dynamics in economic theory.

I have to mention two groups very influential with respect to dynamics in economic theory: the Harvard group and the M. I. T. group. In Harvard University, there have been six prominent professors: three Keynesians, Seymour E. Harris, Alvin H. Hansen, Howard S. Ellis; an original economist, Joseph A. Schumpeter; a Schumpeterian, Gottfried von Haberler; and Gunnar Myrdal who has

34 The admiration of Gottfried von Haberler to Joseph A. Schumpeter is beyond our comprehension. He starts, "Joseph A. Schumpeter was one of the greatest economists of all time," and continues, "the time for a complete and detailed appraisal of Joseph A. Schumpeter's scientific achievements and of his place in the history of economics has not yet arrived. Full appreciation of a work of such magnitude and complexity requires greater time distance for proper perspective." He says he would like to be a founder of the Schumpeterian School, but he concludes, "the main reason why no Schumpeterian School developed is that Joseph A. Schumpeter was neither a reformer nor an enthusiastic partisan of capitalism, socialism, planning, or any other 'ism,' he was a scholar and an intellectual." - Henry W. Spiegel, ed., The Development of Economic Thought: Great Economists in Perspective, New York, John Wiley, 1952, pp. 735, 749 & 761.
established the theory of cumulative process of causation through criticizing the unilateral characteristic of the classical static equilibrium theory and its trade theory. Among them, Gunnar Myrdal belongs to the Swedish School and has no direct connection with the Harvard School. The main figures in the Harvard group have been Joseph A. Schumpeter and Gottfried von Haberler who were also influenced by the Vienna School. Although Alvin H. Hansen is certainly to be called a Keynesian, he has based his original interpretation on a broad point of view.

The classical system which we find in the Harvard group has been severely criticized. In this sense, we can set up a clear distinction between the Harvard group and the next M. I. T. group, although the latter has also been influenced considerably by the economics of J. Maynard Keynes. In connection with economic dynamics, we could pick out the following economists: Charles P. Kindleberger, Paul N. Rosenstein-Rodan, Max F. Millikan, Harvey Leibenstein, Everett E. Hagen, Wilfred Malenbaum, and Francis M. Bator. All of them are members of the Center for International Studies of the Massachusetts Institute of Technology.

In 1953, Ragnar Nurkse became remarkable as an economist in the field of economic dynamics, by publishing a book entitled "Problems of Capital Formation in Underdeveloped Countries." Presently, he is a professor at Columbia University. Besides being loosely connected with Gunnar Myrdal through the theory of the vicious circle, he is isolated as far as schools or sects are concerned. Ragnar Nurkse was born in Estonia in 1907, and after studying at Vienna University from 1926 to 1934, he worked for the Department of Economic Finance of the League of Nations for more than ten years. During this time, he handled several publications of the League of Nations, which were concerned with the problem of international currencies during the two World Wars. He explains his thought on economic development in the book "Problems of Capital Formation in Underdeveloped Countries" which is originally based upon his three lectures at the Economic Research Institute of Brazil in Rio de Janeiro, the National Bank of Egypt in Cairo, and the American Economic Society in 1951 and 1952. In this book he emphasizes the necessity of capital formation to realize economic development by blocking off the vicious circle of poverty. According to him, this could be done

only by effective exploitation of disguised unemployment. To raise the inducement to invest, which is supposed to be very rare in underdeveloped areas, it is absolutely important to create external economies by public investment. On the other hand, it is equally necessary to lower the propensity to consume, which is raised by the so-called demonstration effect. For making saving available, we have to adopt certain control policies with international cooperation, rather than adopting the traditional policy of economic isolation. Thus capital formation might be practicable without foreign aid. This is the outline of his view. One of his contributions is to generalize James S. Duesenberry's demonstration effect, but he emphasizes the demonstration effect on the consumption side too strongly, and his theories of the buffer stock system and the buffer fund, could not avoid being criticized by such practical economists as Sir Sydney Caine, John H. Adler and Peter T. Bauer. Since Ragnar Nurkse proposes the establishment of a buffer fund by general taxation measures, which could be attained by domestic policy, therefore he has a different approach than the others.

38 Ragnar Nurkse, "Trade Fluctuations and Buffer Policies of Low Income Countries---A Symposium; The Quest for a Stabilization Policy in Primary Producing Countries," *Kyklos*, vol. 11, Fascicle 2, April 1958, p. 141.
In this respect we should not forget Albert O. Hirshman who writes his unique idea of 'development strategy' in his recent work, "The Strategy of Economic Development."\(^\text{39}\)

Jacob Viner, an international economist at Princeton University, has a wide perspective. In 1958 he was invited as a guest to the Mont Pelerin Society to which I will refer later. He has done a noteworthy amount of work in both fields, academic and practical. He has given lectures at the following universities; the University of Chicago (1916-1917, 1925), the Hautes Etudes Internationales in Geneva (1930-1931), Stanford University (1937), Yale University (1942-1943), the London School (1946), Cambridge University (1946), and Princeton University (1946-present), and worked for the United States Tariff Commission (1917-1919), the United States Treasury Department (1939, 1942), the United States Department of State (1943-1952), and the Economic Council of the League of Nations (1933). In 1952, he published "International Trade and Economic Development"\(^\text{40}\) and thereby entered the field of economic dynamics. His point of view is relatively conservative and since he leaves the


\(^{40}\) Jacob Viner, International Trade and Economic Development, Lectures delivered at the National University of Brazil, Glencoe, Free Press, 1952.
hope of development to various forces, he is close to Ragnar Nurkse and the group of economists of the United Nations.

In addition to these economists, I must touch on the economic specialist group of the United Nations as a group taking the economic dynamic approach. This group has published "Measures for the Economic Development of Underdeveloped Countries," as well as a few books on land reform, domestic financing of economic development, and instability in export markets, which I have mentioned previously. These publications have decided the direction of dynamics in economic theory. They present domestic and international policies in order to provide for the unemployed, who are classified into four categories: trade-cyclical, seasonal, technical, and disguised, and to promote economic development. We should pay attention to the fact that they spend quite a number of pages analysing such intangible obstacles as traditions and long-established social customs. They bring together all the practical problems such as very difficult and delicate choices: consumption or investment, human investment or material investment, public work or other productive activity, autarchy or foreign trade, manufacturing industry or agriculture. They also analyse

proportion of government and private work, method of procuring domestic capital, rectification of trade policy of developed countries, required amount of foreign capital, and so forth. However, because they offer many interpretations of various questions, lack of theoretical consistency is their chief drawback.

Hans W. Singer, who is active in the Economic Department of the United Nations, is an influential figure, having written many articles since 1950. His economic model of growth is, in short, set up in order to find a meeting point, through the marginal efficiency of capital, between the priority for manufacturing industry and the necessity of maintaining equilibrium among local industries. As a concrete proposal to realize such a meeting point, he calculates the required amount of capital under a few suppositions; if all the increase in agricultural population were absorbed into non-agricultural sections and given capital equipment, in the agricultural section productivity might be raised without an increase in its population (that is, capital deepening is carried out) and external economies would be developed. In order to calculate the

velocity of economic growth from three data—the saving ratio, the capital co-efficient, and the rate of increase in population—he uses the Harrod-Domar formula. Mainly from the practical aspect of technological development, Norman S. Buchanan and Howard S. Ellis\(^4\) criticize Hans W. Singer's theory by reducing it to the following three points: the infant industry argument—the view that specialization in exporting raw materials hinders the progress of other industries; the theory of external economies—the view that the most important gain from industrial development is not the product itself but the benefit which the whole society receives; and a theory of the terms of trade—the view that the terms of trade of countries specialized in primary industry will inevitably deteriorate.

"World real income per capita, and with it the standard of living of the average human being, is probably lower now than twenty-five years ago, and perhaps lower than in 1900," indicates Hans W. Singer in his "Economic Progress in Underdeveloped Countries." Starting from this point, Gunnar Myrdal analyses inequality in the international economy and points out the shortcomings of existing trade theory. He is trying to establish a new

approach to the problem of economic development. He was born in Sweden in 1898, and after graduating from the department of law of the University of Stockholm, he received honorary degrees from Harvard University, Columbia University and the New School for Social Research in New York. During 1938 and 1942, he was invited by the Carnegie Foundation to investigate the American Negro problem and made public "An American Dilemma" in 1944. Afterwards, he filled various government posts in Sweden, such as member of the Upper House, Minister of International Trade and Industry (1945-1947), and Executive Secretary of the Economic Commission for Europe (1947-1957). Then he visited India in order to make a study of economic development and economic planning in the region of South and Southeast Asia which was sponsored by the Twentieth Century Fund of New York. He has handled a number of controversial problems. His criticism of the classical theory of international trade could be summed up as follows:


46 He has not made public his idea after publishing "Rich Land and Poor; The Road to World Prosperity," therefore we could see his recent thought only by a pamphlet, Indian Economic Planning; In Its Broader Setting, New Delhi, Secretary, Congress Party in Parliament, 1958.
in the classical theory, international mobility of labour and capital is not a necessary condition for balancing factor prices, namely, averaging national incomes of various countries. The theory of international trade has been developed from the abstract premise of international immobility of productive factors. This is not necessarily wrong, but it is positively unrealistic and impossible to explain from this the actual unbalance of the world economy. As far as this problem is concerned, the classical theory is 'unrelated,' and if we apply this theory without considering its premise, it might be 'wrong.'

The most fatal premise of the classical theory is the premise of stable equilibrium. In other words, after a primary change, an economic system always adjusts towards a stable point where equilibrium can be attained, unless the next change is caused. Gunnar Myrdal opposes this thought. According to him, economic changes are accumulative if we leave economic process alone. The second change will work in the same direction as the first, therefore inequality instead of equality has been growing in the world economy.

3. Institutionalism and Sociological Considerations

47 Gunnar Myrdal, Development and Underdevelopment; A Note on the Mechanism of National and International Economic Inequality, Cairo, National Bank of Egypt, April 1957.
First of all, I must refer to the Chicago School as a group taking the sociological institutional approach. Being in the wake of Friedrich A. von Hayek, many distinguished economists with new viewpoints have got together since the end of World War II. The chief active members are Milton Friedman and Bert F. Hoselitz, however, the School also includes Peter T. Bauer of Cambridge University, Fritz Machlup who was naturalized in the United States in 1940 after graduating from Vienna University and now at Johns Hopkins University, and Charles Wolf, Jr. of the University of California, who has recently become an economic consultant of the Rand Corporation. These people are on the same line as the following colonial sociologists: Sally H. Frankel, Julius H. Boeke and John S. Furnivall, whom I mentioned before.

This group opposes strongly the 'materialistic' approach, which seems to be quite popular in the United Nations. For example, Sally H. Frankel goes so far as to say that 'real welfare' and 'increase in national income per capita' are completely different things. At the back of this thought, he has empirical fact showing that there is no close relationship between the statistics of national income and the living standard of various countries. His

theory of 'economic impact' regards the process of social structural change by external economic impact as the process of far-reaching social economic re-adjustment. His theory is filled with a number of complicated factors which cannot be explained in terms of such formulary concepts as international investment, capital accumulation or income. Without analysing the pattern of social welfare in respective countries, he continues, economic growth cannot be discussed and here we have to pay attention to social traditions, institutions, and various characteristics of 'dual economy' and 'pluralistic racial society' which have been brought about by racial difference and racial mixture.

It is one of the conspicuous inclinations of dynamic theory to study the relationship between social institutions and economic development, and obviously they have taken the hint from the studies which I have mentioned previously. The pivot of the study has moved from Europe to the United States, mainly because after World War II, the United States has been obliged to grapple with the difficult problem of economic development in underdeveloped countries. It has become absolutely necessary to re-examine the significance and meaning of the traditional abstract economic concepts. Charles Wolf, Jr., who is an economist with the Rand Corporation, Santa Monica,
California, conducted research under a grant from the Ford Foundation on the problem of the social system in underdeveloped countries, while he was at the University of California at Berkeley, jointly with Chandler Morse of Cornell University. He made public one of the results of the research project in the American Economic Review.\footnote{49 Charles Wolf, Jr., "Institutions and Economic Development," American Economic Review, vol. 45, No. 5, December 1955, pp. 867-883. He is also a coauthor with Sidney C. Suffrin of Capital Formation and Foreign Investment in Underdeveloped Areas, Syracuse University Press, 1958.} According to Charles Wolf, Jr., while inadequacies of existing technology and investment invariably characterize underdeveloped economies, these characteristics are perhaps correlative rather than causal. The inadequacy of technology and capital formation may be due less to the shortage of information about techniques or of potential savings, than to the shortage of the 'right' kinds of institutions--'right' implying those kinds of institutions which permit or stimulate, rather than impede, the adoption of new techniques and the formation of productive capital. In other words, institutions, as well as capital and technology, are productive. Growth-promoting institutions may so build up the environment in which factors of production meet, that the rate at which combinations occur is accelerated.

Charles Wolf, Jr. writes, "Institution refers to
organizations and policies, both governmental and private," and institutions may stimulate or impede various behaviours leading to economic growth by their effect on "(i) the direct calculation of costs and benefits; (ii) relationships between production and distribution (output and income); (iii) the order, predictability and probability of economic relationships; (iv) knowledge of economic opportunities; and (v) motivations and values." For example, the initiations and enforcement of protectionist commercial policies, such as the imposition of tariffs, foreign exchange taxes, subsidies, or low interest loan, to stimulate investment is a case of (i); the mercantile guild or certain types of insurance systems belong to (iii). By using these five items, Charles Wolf, Jr. classifies functionally the various institutions which have been developed in underdeveloped countries and stresses the importance of their roles in economic growth.

Bert F. Hoselitz of the Chicago School goes a step further in this problem,50 and analyses the role of noneconomic factors in the economic change which occurs in an economy as leaves a state of relatively slow growth of stagnation and starts a process of rapid growth. He tries to analyse the problem of how to account for the explosive change which has so aptly been called an industrial

revolution. What is most important to him about the structural changes taking place during the explosive change period is the adoption of previously existing institutions for new ends, especially for capital formation. Bert F. Hoselitz notices a big difference in the rate of investment after the explosive change in an economy and explains this phenomenon by asking whether or not general 'environmental conditions' have been created to make an increase in net capital formation attractive and achievable.

The 'environmental conditions,' which enable the rapid growth, must be sought chiefly in noneconomic aspects of the society, continues Bert F. Hoselitz. Apart from the build-up of economic overhead capital, such as communications and transport system and investment in harbour facilities, some warehouses, and similar installations favouring especially foreign trade, most of the innovations introduced during the preparatory period are based upon changes in the institutional arrangements in the legal, educational, domestic or motivational orders. Once these new institutions have been created, they operate as gifts from the past, contributing freely to the vigorous spurt of economic activity in the period of explosive growth. To be concrete, the need for capital requires the availability of institutions through which savings can be collected and channeled into projects.
Hence a banking system or its equivalent, in the form of a state agency collecting revenue and spending it on development projects, is required.

On the other hand, he emphasizes the significance of the availability of skilled labour of various kinds and illustrates the difference of economic growth between Japan which was interested in Dutch studies, and China which had no technical knowledge. He also analyses social marginality which is actually a driving force to the institutionalization of entrepreneurship, and concludes that the role of social marginality which might be regarded as social deviance is extremely manifest.

From this simple presentation we see that Sally H. Frankel's theory of structural change is modernized and made concrete by Bert F. Hoselitz.

One of the groups, using the sociological institutional approach, is the Mont Peléerin Society which has a close relationship to the Chicago School. This society has a definite purpose, to study and develop the philosophy of Friedrich A. von Hayek who made public his idea of pure individualism by the book entitled "The Road to Serfdom." In 1944, when the opinions on the post-war economic system were sharply dividing into liberal economists and planning economists, Friedrich A. von

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51 Friedrich A. von Hayek, The Road to Serfdom, Chicago, University of Chicago Press, 1944.
Hayek published this book, in which he censures planned economy as totalitarianism, from a purely individualistic point of view. Among the members of the Society are the late Walter Eucken of Germany, Ludwig Erhard, Minister of Economics for Germany, Henry Hazlitt of the New York Times, Wilhelm Röpke of Switzerland, Peter T. Bauer of Cambridge University, Milton Friedman of the University of Chicago, Sally H. Frankel, Fritz Machlup, a number of distinguished people from the United States, the United Kingdom, Germany, France, Italy, Switzerland, Japan and so forth. Recently, the Mont Pelérian Society has shown a deep interest in economic growth, and particularly Peter T. Bauer is worth watching.

To Peter T. Bauer, what is called the 'new orthodoxy' represented by Gunnar Myrdal, Ragnar Nurkse, a part of the M. I. T. group and the United Nations group, suffers from many misunderstandings and fallacies in various aspects. The discussions of the 'new orthodoxy' are based on the theme of the vicious circle of poverty and backwardness, however, although there are certain differences in ways of expression, these arguments simply repeat the same theme. For instance, according to the "Economics" of Paul A. Samuelson which is the most popular text book in north America:

"Backward nations cannot get their heads above water because their production is so low that they can spare nothing for capital formation by which their standard of living could be raised."

Ragnar Nurkse says in his "Problems of Capital Formation in Underdeveloped Countries" that:

"In discussions of the problem of economic development, a phrase that crops up frequently is 'the vicious circle of poverty.' It 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."

And the same idea is expressed in Gunnar Myrdal's "An International Economy" as follows:

"It is, in fact, the richer countries that are developing while the poorer areas, with the large population, are stagnating or progressing much more slowly. For mankind as a whole there has actually been no progress at all. As Mr. Hans W. Singer has rightly pointed out, world real income per capita, and with it the standard of living of the average human being, is probably lower now than twenty-five years ago, and perhaps lower than in 1900, because the nations that have rapidly raised their economic standards have been a shrinking proportion of the total world population."

Furthermore, the arguments follow this theme continuously—to cut off this vicious circle, private investment is insufficient, and inter-governmental donations on a large scale and loans with subsidy by

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developed countries are needed. Peter T. Bauer believes that most of these discussions are fundamentally mistaken.

According to Peter T. Bauer, these discussions find underdeveloped countries all in poverty, however, they usually use the term, underdeveloped countries, to cover the whole of Asia (with the possible exception of Japan), Africa, Latin America (with Argentina sometimes omitted) and parts of Eastern and Southern Europe. Defined in this way, the underdeveloped areas contain about three-quarters of the population of the world. These areas are diverse

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56 His belief is shown in the following lines. "Over the past two decades there has grown up on both sides of the Atlantic a new orthodoxy of thought regarding the ancient problem of economic development—-an orthodoxy that is based largely on fallacy. --- I do believe that the new orthodoxy has tended to promote some very misleading doctrines and delusions. Specifically, I hold that the doctrine of an unbreakable vicious circle of poverty in the underdeveloped areas is largely a myth. --- Lastly, I would stress that economic development in a meaningful sense is not just an increase in the volume of goods and services a nation produces. It is an increase in goods and services that people want and have freely chosen. It is a widening of human options. --- It is not true that the younger nations are caught in a vicious circle of poverty. It is not true that they have stagnated or must stagnate. What is true is that their further advance depends fundamentally on their adoption of measures that will free up rather than constrict exchange, individual effort, the division of labour, and private capital formation, and will give play to what are sometimes slightly referred to as the middle-class of 'bourgeois' virtues." Peter T. Bauer, "Economic Growth and the New Orthodoxy," Fortune, vol. 57, No. 5, May 1958, pp. 142-198.

in many aspects, such as in density and growth of population, political and social institutions, economic growth, and economic quality of people. In spite of this diversity, most of the theories bring them up together for discussions. This is completely wrong. The presently developed countries used to be underdeveloped, and they have accomplished prosperity with little external capital and no donations. Peter T. Bauer criticizes the theory of the vicious circle by using a number of facts and statistics.

Peter T. Bauer puts special emphasis on the investment in cash crops at the beginning of capital formation. This sort of investment is very efficient and has played a noticeable role in the process of economic development in a good many countries, but it is ignored even by the statistics of the United Nations. And the fact that rubber plants and cocoa trees are existing as cash crops in Malaya and in Ghana, denies the premise of the 'new orthodoxy' that the natives are incapable of establishing long-run economic programmes. There is no reason to say that manufacturing industry is the only measure to promote economic development, and the study of economic history does not justify the idea that governmental aid on a large scale solely makes industrialization possible.

It seems to me that Peter T. Bauer's theory is
brought up from the antagonism to Ragnar Nurkse's buffer policy which was revealed at the symposium of Kyklos in April 1958, and his theory is the same as the idea of Sir Sydney Caine, who is an authority on Malayan affairs, besides being Director of the London School of Economics.

Thus, Peter T. Bauer, who strongly objects to the development projects based upon the 'new orthodoxy' theory, inevitably takes up the problem of priority in national schemes in assessing the gains of private enterprise, which is explained by Gunnar Myrdal. The 'new orthodoxy' leaves no doubt that the increase in governmental investment by compulsory saving is absolutely necessary to raise national product, however, Peter T. Bauer believes it is not necessarily important. We find several cases of economic development without compulsory saving, and besides, nobody can be sure that forced saving effects capital accumulation or increase in output. Compulsory saving is merely a money shift.

58 Ragnar Nurkse, "Trade Fluctuations and Buffer Policies of Low Income Countries—A Symposium; The Quest for a Stabilization Policy in Primary Producing Countries," Kyklos, vol. 11, Fascicle 2, April 1958, p. 141. In this symposium, ten economists were in attendance: Peter T. Bauer, Frank W. Paish, John H. Adler, Sir Sydney Caine, Roy F. Harrod, etc.

59 Gunnar Myrdal, Development and Underdevelopment; A Note on the Mechanism of National and International Economic Inequality, Cairo, National Bank of Egypt, April 1957, pp. 66–67, 73.

from the private sector to the public sector, and if we take account of its effect on private capital formation, we would know compulsory saving makes little contribution to capital supply. Whatever measures of investment we formulate, the increase in output is not simple function of investment and even though an increase in output is brought about, it is not always a desirable output.

In brief, before discussing the problems of compulsory saving, development project or inter-governmental loan, Peter T. Bauer thinks, consolidation of organization for raising racial capital by underdeveloped countries themselves, and removal of restriction to the induction of foreign capital, should be done. He is a liberalist who advocates the natural economic development through free activity of private enterprise.

In his "Economic Analysis and Policy in Underdeveloped Countries," Peter T. Bauer says we have to remember the distinctions between positive economics, normative economics and the art of political economy. Propositions of positive economics refer to what is, those of normative economics to what ought to be, and those of the art of political economy to the means for obtaining specified results. To him, positive economics has primacy in the sense that the most significant and distinctive contributions the economist can make to
normative economics and to the art of political economy stem from the generalizations established by positive economics. At last he declares, "I shall deal almost entirely with positive economics." He continues, when we understand the real conditions of underdeveloped countries, such economic generalizations as the law of demand, the law of supply, Gresham's Law, the dependence of the division of labour on the extent of the market, the tendency of individuals to turn to activities yielding the highest net advantage within the opportunities open to them, become very useful. Peter T. Bauer and Milton Friedman, the members of the Cambridge School of Economics, are frequently confronted with the 'Keynesians' of Harvard University and M. I. T. with respect to concrete problems.

63 The Cambridge Economic Handbooks, to which both of them join, were organized by J. Maynard Keynes firstly, and succeeded by Sir Dennis H. Robertson in 1936 and by Claude W. Guillebaud in 1946. In the original introduction, J. Maynard Keynes wrote, "The writers of these volumes believe themselves to be orthodox members of the Cambridge School of Economics. At any rate, most of their ideas about the subject, and even their prejudices, are traceable to the contact they have enjoyed with the writings and lectures of the two economists who have chiefly influenced Cambridge thought for the past fifty years, Dr. Marshall and Professor Pigou." Peter T. Bauer & Bersil S. Yamey, The Economics of Under-developed Countries, Cambridge, Cambridge University Press, 1957, p. v.
of approaches. The attitude of the Cambridge School to examine closely various premises about national income, labour force, natural resources, human resources, and the relationship between capital and economic growth, is a frontal challenge to the 'new orthodoxy' who seem to be trying to apply analytical tools without consideration of those premises.

Milton Friedman is the nucleus of the Chicago School and his activity is now noticeable. He was born in Brooklyn in 1912 and during World War II, he worked for the National Bureau of Economic Research as a member of the research staff. At that time, he collaborated with Carl Shoup and Simon S. Kuznets and recently he started the study on Keynes with a new approach.

Primarily, the Chicago School has been inclined to take a new look at the post-Marshallian economics brought up in Europe. Milton Friedman follows in the wake of this basic trend. For instance, he admits the usefulness of the utility theory which was built up by Léon Walras and others, however, he makes a searching inquiry into the problem of utility measurement and tries to formulate a more realistic system. He criticizes Léon Walras; "His problem is the problem of form, not of content: of displaying an idealized picture of the economic system, not of constructing an engine for analysing
concrete problems." Therefore, as far as pure theory is concerned, he is completely different than Joseph A. Schumpeter. 65

4. Professor Rostow's Formulation of Conclusions from the above.

As I explained at the beginning, the final determination of the genealogy of various approaches to economic development requires greater time for proper perspective. Different opinions, seemingly founded on different bases at a transitional period, usually become a broad system by improving each other at a synthesizing period.

This process has been started in the field of dynamic theory by Professor Walt Whitman Rostow. First of all, I should like to illustrate his position with respect to the whole dynamic theory. 66

65 Joseph A. Schumpeter, History of Economic Analysis, New York, 1954, p. 827. He says; "So far as pure theory is concerned, Walras is --- the greatest of all economists."
66 This illustration is simply designed to show the general positions of all the economists I have mentioned previously in order to trace the main trend of dynamic theory and throw a new light on Professor Rostow's theory. It is neither a complete schematization of the approaches nor a comprehensive survey of the theories. Since a thought of each economist is many-sided, a strict classification of the theories is very misleading and it should be carefully avoided.
Professor Walt Whitman Rostow was born in New York in 1916. After having made his doctor's degree in Yale University in 1940, he began his career as an instructor of economics in New York. During these twenty years, he has done such works as follows:
Walt Whitman Rostow

(Year) (Career) (Publications)

1938 ---Investment & the Great Depression
1939 ---Investment & Real Wages; 1873-1886
1940 ---Explanations of the Great Depression; 1873-1896

Instructor of Economics
Columbia University

1941 ---The Growth & Fluctuation of the British Economy; 1790-1850
---Business Cycles; Harvests & Politics; 1790-1850

1942 ---Adjustments & Maladjustments after the Napoleonic Wars

1943
1944
1945

Assistant Chief
German-Austrian Economic Division, Dept of State

1946
Professor of U.S. History
Oxford University

1947 ---The American Diplomatic Revolution
Assistant to Economic Secretary
Economic Commission for Europe

1948 ---British Economy of the Nineteenth Century

(ditto)

1949
Professor of U.S. History
Cambridge University

1950 ---The United Nations' Report on Full Employment
---The Terms of Trade in Theory & Practice

Professor of Economic History
M. I. T.

1951 ---The Historical Analysis of the Terms of Trade
---Some Notes on Mr. Hicks & History

(ditto)
Staff Member
Center for Int'l Studies
M. I. T.

1952 ---The Process of Economic Growth

1953 ---The Dynamics of Soviet Society
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<td>Trends in the Allocation of Resources in Secular Growth</td>
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<td>1955</td>
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<td>An American Policy in Asia</td>
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<td>1956</td>
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<td>The Take-off into Self-sustained Growth</td>
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<td>A Proposal; Key to an Effective Foreign Policy</td>
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<td>1958</td>
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<td>Rostow on Growth; A Non-Communist Manifesto</td>
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Judging from his career and publications, we could see that his dynamic theory is based upon a broad study of Europe, the United States, the Communist area, and Asia as well as a historical perspective. He commenced extensive contribution to dynamic theory by "The Process

77 Walt Whitman Rostow, "The Historical Analysis of the Terms of Trade," Economic History Review, vol. 4, No. 1, 1951, pp. 73-76.
of Economic Growth" in which he suggested that variations in the behaviour of people relevant to economic development can be summed up in a number of propensities—propensities to seek material gain, to propagate and rear children, to strive for material advance, to pursue pure science, to apply science to the material world, and he divided the growth process into the accomplishment of certain preconditions—the achievement of the appropriate combinations of those propensities, and the process of development itself, which follows when the preconditions have been met. His second direct contribution is "Trends in the allocation of Resources in Secular Growth" which emphasizes strategic sectors of economic development in which concentrated investment and other inputs lead to rapid growth. He makes a distinction between primary growth, stimulated by increase in demand partly and by innovations mostly, and the parallel growth of supplementary growth sectors, needed to supply the intermediate products and factor inputs for the primary sector. The increase in income produced by these sectors spills over into derived growth sectors, selected by the dictates of income elasticity.

Those two works are regarded as his preparatory stage. He has become one of the most stimulating economists since World War II, because of the following works. "The
Take-off into Self-sustained Growth" is an epoch-making article in the field of dynamic theory. Not only by his induction of the theory of take-off from wide practical facts, but also by taking account of social structure and institutional organization as well as economic factors, the new movement to fill up the gap between economic dynamic approach and sociological institutional approach has been brought out. On the one hand, he gives the fundamental idea to Bert F. Hoselitz who modernizes and makes concrete the theory of structural change of Sally H. Frankel by applying his theory. On the other hand, it is developed in his next work with Max. F. Millikan "A Proposal; Key to an Effective Foreign Policy" which recommends the reconsideration of the essential intention of foreign aid, usually based upon the simple hope of preventing communization by gratifying the hunger of the poor masses of underdeveloped countries.

His take-off theory, which he made public in 1956, was firstly adopted by both approaches, the M. I. T. group of the economic dynamic approach and the Chicago School of the sociological institutional approach, and hence he was situated in the middle of the two approaches. His position was passive at this stage. However, during

the fall of 1958, after one year silence, he made the most striking lectures, "An Economic Historian's Way of Envisaging the Sweep of Modern History," at Cambridge University, which were summarized in 'The Economist' under the title of "Rostow on Growth; A Non-Communist Manifesto."

The criticism of Peter T. Bauer to the 'new orthodoxy' or those text-book-like-works by Charles P. Kindleberger, Geral M. Meier and Robert E. Baldwin, and Benjamin H. Higgins could be regarded as the attempts to synthesize the different approaches to dynamic theory, but their arguments are either very narrow and restricted or simply collective. As I will discuss in detail afterwards, Walt Whitman Rostow has recently made a synthetic dynamic theory based upon actual facts by using the economic dynamic technique under the consideration of sociological institutionalism. His attitude is no longer passive but active.

In "A Non-Communist Manifesto," we find the characteristics of Charles Wolf, Jr., Sally H. Frankel, Bert F. Hoselitz, Peter T. Bauer, as well as Ragnar Nurkse, Eugene Staley, and the M. I. T. group. In a sense, he

sets down many familiar truths in a new and interesting formulation, however, as 'The Economist' says, his broad understanding of existing theories and his overall research of practical facts make me believe that his dynamic theory represents one of the most stimulating contributions made to economic and political thought since World War II.
CHAPTER III.

THE THEORETICAL BASIS OF PROFESSOR ROSTOW'S INTERPRETATION

1. The Basic Theory
2. The Process of Development
3. Illustrations from Various Countries

"We must not picture to ourselves an unreal world as it might, or ought to be, and make schemes for it. That way lies social madness, leading to a failure of hot aspirations and thence to cold reaction. Our first duty as economists is to make a reasoned catalogue of the world as it is."

---Alfred Marshall
III. The Theoretical Basis of Professor Rostow's Interpretation

We have noticed that economic development is to some extent dependent upon the political, social and cultural framework of societies, however, no effort has been successful in linking such non-economic variables to the structure of modern economics. The pursuit of the problems of capital accumulation, balance of payments, technological development, population, land, colonialism, and political affairs respectively in different countries has a meaning in itself, but now the time has come to integrate them and build up a synthetic dynamic theory of economic growth on a global basis. The first dynamic attempt is being made by Professor Walt Whitman Rostow.

1. The Basic Theory

The social scientist cannot afford to lag in his scientific formulations too far behind the events and problems of the active world, because intelligent democratic action is related to the degree to which problems are understood and the public is informed, and it is in this underlying function of perception and education that the social scientist most importantly serves society.1 Because Professor Rostow believes in

this idea, actual historical facts and economic analytical techniques are aptly combined in his dynamics.

To Professor Rostow, as an economic historian, it is absolutely necessary to avoid making a disembodied response to an abstract set of Hegelian ideas, and, as an economic theorist, he could not be satisfied with economics in the conventional market sense. Actual events should be emphasized and over-simplification must be avoided. In the process of economic development, he sees a set of stages of growth—five economic categories in one of which all societies in the world can be placed. "They are a matter of factual history seen in the light of economics," this shows his basic attitude.

A long period: Establishing the pre-conditions for take-off;

.....I The traditional society——Stagnation

.....II The transitional society——Consolidation

A few decades: The crucial process;

.....III The society in take-off

A long period: Making growth normal and automatic;

.....IV The maturing society———Adolescence

.....V The mass consuming society——Consummation

Roughly speaking, the economic development of any country can be divided into three periods: a long

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period of a century or more during which the pre-conditions for take-off are established; a few decades into which the take-off is compressed; and a long period when economic growth becomes normal and automatic through the fluctuating years of sustained economic progress. More precisely, the first and the last periods consist of two stages each, therefore there are five stages: the traditional societies in which the inaccessibility of modern science puts a ceiling on productivity; the transitional societies which are created once a country is rich enough to devote more than about five or ten per cent of its national income to investment and once a new leading élite has emerged which has the urge and scope to begin building a modern industrial society; the societies in take-off which start to transform themselves so that economic growth becomes more or less automatic; the maturing societies in which, dangerously enough, the imperatives of diffusing the new technology lose their obsessive control over people's minds; and the mass consuming societies which are in some dilemma between three options, high mass consumption, welfare state, or external expansion.

Professor Rostow's theory is based upon three kinds of sector. First, primary growth sectors associated with particularly favourable opportunities for inno-
vation and resource discovery. Second, supplementary growth sectors which expand as a response to, or requirement of, advance in the primary sectors. Third, derived growth sectors where advance responds to growth of national income, population, output and so forth. The main feature of his dynamics is the theory of take-off which is defined as follows:

"The interval during which the rate of investment increases in such a way that real output per capita rises and this initial increase carries with it radical changes in production techniques and the disposition of income flows which perpetuate the new scale of investment and perpetuate thereby the rising trend in per capita output."

In this theory we find the basic characteristics of his earlier work, "The Process of Economic Growth," in which he analyses economic development by using six propensities: the propensities to develop fundamental science, to apply science to economic ends, to accept innovations, to seek material advance, to consume, and to have children, and divides the growth process into two parts, namely, the accomplishment of certain preconditions and the development process itself. But the Professor Rostow of seven years ago and his present thought are different. As a matter of fact, he has

developed his original theory to the utmost extent in order to make answers to the following questions.

- How, and under what impulses, do traditional, agricultural societies begin moving towards modernization?
- When and how does regular growth come to be a built-in feature of each society?
- What forces drive this growth along and determine its contours?
- How should the traditional society react to the intrusion of a more advanced power?
  --- With cohesion, promptness and vigour?
  --- By making a virtue of fecklessness?
  --- By slowly and reluctantly altering its traditional characteristics?
- When independent modern nationhood is achieved, how should the national energies be used?
  --- In external aggression, to right old wrongs or to exploit new possibilities for enlarged national power?
  --- In completing the political victory of the new national government over regional interests?
  --- In modernizing the economy?
- Once the take-off is successfully achieved and growth is under way, how far should the aim of diffusing technology and maximizing the rate of growth be modified by the
desire to increase consumption per head and welfare?

* What relation does the relative sequence of growth bear to outbreaks of war?

* When technological maturity is reached, and the nation has at its command a modernized industrial machine, to what ends should it be put, and in what proportion?
  ---To increase social security, through the welfare state?
  ---To expand mass consumption into the range of durable consumer goods and of services?
  ---To gain stature and power on the world scene by military adventure?
  ---To increase leisure?

* Where is compound interest taking us?
  ---To communism?
  ---To the affluent suburbs?
  ---To destruction?
  ---To the moon?6

Benjamin H. Higgins writes that Professor Rostow's conception of the stages of growth does correspond roughly to the data and general information about economic development of various countries, however difficult the dating of these stages may be.7 In replying to this,

Professor Rostow says, in surveying the broad contours of each stage of growth, we are examining not merely the sectoral structure of economies transforming themselves, but a succession of strategic choices made by whole societies.  

With respect to this point, W. Arthur Lewis gives us a superb paragraph in his "Theory of Economic Growth."

"Every economist goes through a phase where he is dissatisfied with the deductive basis of economic theory, and feels sure that a much better insight into economic process could be obtained by studying the facts of history. The instinct is sound; yet the enthusiasms of this phase seldom survive any serious attempt to get to grips with the facts of history. This is because there are very few facts in the relevant senses. We mean by this, in the first instance, that it is only for a few countries and for very recent periods that any adequate quantity of historical records exists; and even when there are plenty of records we cannot always be certain exactly what happened. We mean also, more significantly, that the facts which would interest the theorist are not what happened but why it happened; and while history may record what happened, it is seldom able to record why it happened."

2. The Process of Development

No two of the countries are alike, and the problems of economic development are shaped in each by its resources, its culture, its history, and its political

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institutions. Nevertheless, we have a general recognition that there are common elements in the growth patterns of various countries. Professor Rostow formulates the process of economic growth into five stages which are "a matter of factual history seen in the light of economics."

(i) The Traditional Society

The traditional society is characterized by the existence of a ceiling on productivity. It contains an economy mainly agricultural, using more or less unchanging production methods, saving and investing productively little more than is required to meet depreciation.

Food production absorbs more than seventy-five per cent of the working force, social hierarchy is rigid, social values are limited, religious feasts and ceremonies, monuments and wars constitute the greater part of consumption, family and clan connections play a large role, and political power is extremely regional.

Professor Rostow says as under: 10

"Implicit in these characteristics is the need for a many-sided transformation before growth can be established and lead on to maturity. A predominantly agricultural society must be transformed into one predominantly occupied in industry, communications, trade and services. --- Man must come to regard his physical environment not as virtually a factor given by nature and providence, but as an ordered world that can be manipulated in ways which yield productive change."

To be concrete, a society must orient its commerce and thought to the nation, the propensity to have children must decline, income above minimum levels of consumption must be spent on transportation, education and industry, and people must come to be valued for their individual ability to perform increasingly specialized functions. What is important is that some of them must be well advanced before growth can set in at all. We cannot expect any simultaneity or sequence in these changes.

(ii) The Transitional Society

The transitional society is the process of establishing pre-conditions for take-off. In most general case the achievement of pre-conditions requires major change in political and social structure and in cultural values, which are the matter of the propensities. In another case the pre-conditions are initiated by a narrowly economic process, that is, by the high levels of welfare which can be achieved by exploiting land and natural resources. This is a matter of the yields.

The formula of growth to become self-sustained can be explained economically by using the rate of investment and the stock of capital per capita. According to Professor Rostow, the economic difference between a traditional and a modern society is a question of whether
its rate of investment is low relative to its rate of population growth or not. Under five per cent of national income is low and over ten per cent is high. In order to raise the rate of investment, the manipulation of modern technology, the introduction of inventions productively into the capital stock, the preparation for lending money on long term to back the innovating entrepreneurship, and the opportunity to educate the people to operate an economic system, are needed.

"Capital formation is not merely a matter of maximizing profit; it is a matter of a society's effective attitudes towards science, applied science, and risk-taking as well as the adaptability of the working force. --- Of special importance here are the problem of increased productivity in agriculture and the extractive industries, and the problem of social overhead capital."

We must watch the facts that agriculture and the extractive industries make up accessible natural resources. The increase in productivity needs a great amount of working capital which must be financed by increasing output, loans, capital imports, and the unexploited backlog of innovations. Agriculture must supply more goods to meet the rise in population, more markets for the future leading industrial sectors, more sources of taxation from which the government functions are financed, and more loanable funds to the modern sectors. Social overhead

capital, which takes a long time to be brought up, and yields the overall returns to the community as a whole although it is lumpy, must occupy a very high percentage of total investment.

In the non-economic side of the pre-conditions, a new leading elite who supersede the old land owners and build an industrial society, xenophobic nationalism which is the strongest motive force to be modernized, a demonstration effect which has two sides in the colonial world ---the positive type demonstrates the real effective power of an ability to wield modern technology; the negative type creates an accumulating resentment against more industrialized foreigners, and the movements of the soldiers, the politicians, the merchants and the intellectuals, take the major roles. "The soldiers bring much more to the job than resentment of foreign domination or dreams of future national glory in battle," the politicians drive home the triumph of the centre over the regions, the merchants find in modernization the prospect, and the intellectuals bring about social, political and legal reform because they see in modernization ways of increasing the dignity and value of human life for individuals and for the nation as a whole.

Finally we must say that, in the period of pre-conditions, the most important thing is the establishment
of an effective modern government which is capable of organizing the nation so that unified commercial markets develop. A tax and fiscal system to divert resources into modern uses must be created, the stock of social capital must be assured, and the radical changes in productivity in agriculture and extractive industries must be brought about.

(iii) The Society in Take-off

During the stage of take-off, the country makes the complex transition to a position where sustained economic growth becomes possible. In his original publication about the theory of take-off, Professor Rostow defines the take-off as requiring all three of the following conditions:  

"(a) A rise in the rate of productive investment from (say) five per cent or less to over ten per cent of national income;
(b) The development of one or more substantial manufacturing sectors, with a high rate of growth;
(c) The existence or quick emergence of a political, social and institutional framework which exploits the impulses to expansion in the modern sector and the potential external economy effects of the take-off and gives to growth an on-going character."

The rises in rate and productivity of investment, and self-reinforcement of the developing process are realized by many different human motivations which are

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technological, economic, political, social and cultural. 
The essential problem is the fact that the prior develop-
ment of the society and its economy result in a positive,
sustained and self-reinforcing response to it. The 
result is not a once-over change in the production function 
or in the volume of investment, but a higher proportion 
of potential innovations accepted in a regular flow, and 
a higher rate of investment.

W. Arthur Lewis describes this situation as 
follows:13

"The central problem in the theory of economic 
development is to understand the process by which 
a community which was previously saving and invest-
ing four or five per cent of its national income or 
less, converts itself into an economy where volun-
tary saving is running at about twelve to fifteen 
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). We cannot 
explain any industrial revolution (as the economic 
historians pretend to do) until we can explain why 
saving increased relatively to national income."

No matter how important it is to analyse the 
take-off in terms of national income, the proportion of 
output invested, and an aggregate marginal capital-output 
ratio, we must consider what actually happens and the 
causal processes at work in a take-off. There is no 
single pattern. Still as "a matter of factual history 

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13 W. Arthur Lewis, "Economic Development with Unlimited 
Supplies of Labour," Manchester School of Economic and 
Social Studies, May 1954.
seen in the light of economics, we can point out several aspects.

The loanable funds required to finance the take-off come from two types of sources: from shifts in the control over income flow, including income-distribution changes and capital imports, and from the plough-back of profits in rapidly expanding sectors. One of the oldest and most fundamental notions in economics is the notion of economic development occurring as the result of income shifts from those who will spend, hoard or lend less productively to those who will spend or lend more productively. As a matter of fact, the supply of finance during the take-off period has three points: 

further productive investment.

The existence and successful activity of entrepreneurs are required for take-off, with significant power over aggregate income flows and industrial investment decisions. The propensity to accept innovations depends more or less on entrepreneurship. Undoubtedly, most take-offs are preceded or accompanied by radical change in agricultural techniques and market organization. A requirement for take-off is a class of farmers willing and able to respond to the possibilities opened up for them by new techniques, land-holding arrangements, transport facilities, and forms of market and credit organization.

Land reform creates two impulses to take-off. One is the use of the flow of payments not from landlords but from peasants for activity which encourages economic development, and another is the use of the investment of the more enterprising landlords for commerce and industry. In any case, the feudal landlords suffer a certain confiscation effect.

Capital formation is aided by price inflation, which shifts resources from consumption to profits. Banks and capital markets help this shift too.

The existence of more than one growing sector, from which entrepreneurs plough-back a very high proportion
of profits into new capacity is another necessary condition. With respect to this problem, the demand side of the investment process must be taken into account because it may be the decisive element in the take-off, rather than the supply of loanable funds. Substantial improvements in the machinery of capital supply cannot initiate a take-off.

Foreign trade is an extremely important source of plough-back profits. From the natural resources, developing economies create major export industries, and the expanding yield of these industries finances the import of capital equipment. Of course, capital formation is not guaranteed by the development of export sectors.

The key role in the take-off process is played by the various sectors which Professor Rostow divides into three parts.15

"(a) Primary growth sectors, where possibilities for innovation or for the exploitation of newly profitable or hitherto unexplored resources yield a high growth rate and set in motion.

(b) Supplementary growth sectors, where rapid advance occurs in direct response to—-or as a requirement of—-advance in the primary growth sectors; e. g., coal, iron and engineering in relation to railroads. These sectors may have to be tracked many stages back into the economy.

(c) Derived growth sectors, where advance occurs in some fairly steady relation to the growth of total real income, population, industrial production or some other overall, modestly increasing parameter. Food output in relation

to population, housing in relation to family formation are classic derived relations of this order."

Changes in supply are a matter of primary and supplementary growth sectors and changes in demand are linked to derived growth sectors. It is evident that primary growth sectors always play the main part in the process of economic development. The establishment of cotton textile industries, the introduction of railways, and the modernization of armed forces can constitute the leading sectors. Sometimes, raw material industries and foodstuff industries play the role of leading sectors. "History is full of variety," and "there is no one pattern or sequence for the take-off."

(iv) The Maturing Society

The take-off requires a massive set of preconditions going to the heart of a society's economic organization and its effective scale of values. The rapid growth of more than one new manufacturing sectors is a powerful and essential engine of economic development. For the take-off to be successful, it must lead on progressively to sustained growth which implies further deep and slow-moving changes in the economy and the society as a whole.

Although the maturing society is greatly influenced by the nature of the take-off, we can discover
several characteristics of its long, fluctuating story of sustained economic progress.

As the economy matures, overall capital per capita increases, the initial key industries decelerate as diminishing returns operate, the pioneering entrepreneurs give way to less single-minded industrial leaders, the average growth rate is maintained by a succession of new growing sectors, the proportion of population in rural pursuits declines, and the international aspects become more important. Here we must be careful not to confuse being technologically mature with being rich.

In this maturing society, some proportion of the national income is steadily ploughed back into expanding productive capacity and as technique improves the structure of the economy changes continuously. It means the economy may face difficult balance of payments problems and makes its terms with the requirements of efficient production. With the lapse of time, the demand for foreign capital slackens and domestic savings become abundant.16

Professor Rostow emphasizes the importance of non-economic aspects of the maturing society.17 The new

modern elements are in full and confident power, with their opponents in retreat of disarray. Generally, the power of those who control capital and technology is not strongly opposed. But, the situation is neither static nor decisive. Because of three reasons: firstly, a change in the working force comes. The highly trained technicians and professionals perceive that they can achieve higher real wages and greater security although their real wages are likely to be rising. Therefore, the maturing process generates the kind of social pressures which enforce humane modifications to the process of economic development. Secondly, a change in the character of the leadership appears. It is the changing process from primitivism to the efficient manager of a highly bureaucratized and differentiated machine. Thirdly, a change in the idea which believes in the merits of industrialization inevitably comes out. People get tired of the miracle of the efficiency-almighty society.

"These changes in the structure, ambitions and outlook of the society lead up to a set of searching choices concerned with future objectives. -- Maturity, like middle age, is a time of dangerous as well as promising choices."

(v) The Mass Consuming Society

"History is full of variety," and "civilization's

progress as a consequence of response to some challenge" will not be stopped, however, when the values of the market place and the imperatives of diffusing the new technology lose their monopolistic control over people's minds, "what happens next?" Geography, resources, values and the political leadership may determine the pattern of high maturity. According to Professor Rostow, the society has four broad objectives which decide the social balance.

First, the national pursuit of external power and influence; second, the welfare state in which the alleviation of the business cycle, the increase of social security, the redistribution of income, and mitigation of harshness are given a higher priority; third, the expansion of mass consumption levels from basic food, shelter and clothing to durable consumer goods and services; and fourth, the increase in leisure.

The high consumption comes by no means to an end, but the balance among these four objectives varies over time and between different societies. "There is bound to be variety in the patterns of consumption that will emerge as compound interest grinds on and as the income elasticities of demand, in their widest sense, reveal themselves in different societies."

When the people lose their interest in gaining food, shelter and clothing which have taken up the life of most human beings since the beginning of time, "what happens next" besides the arms race and the threat of war? Some believe that poverty and civil strife are a necessary condition for a lively human existence. The great majority hope for better solutions.

In the end, it is the problem of a sense of the community of human destiny.

"One thought ever at the fore---
That in the Divine Ship, the World, breasting Time and Space,
All peoples of the globe together sail, sail,
the same voyage;
Are bound to the same destination."20

3. Illustrations from Various Countries

The scientific formulation should be based upon the events and problems of the active world. Professor Rostow's dynamics of economic development is a matter of factual history seen in the light of economics. I would like to illustrate the economic growth of thirty-nine countries throughout the world with special emphasis on what Professor Rostow has used to formulate his theory. These illustrations do not intend to cover the whole history of economic development.

Selection of Countries

★ North America
- Canada
- United States
- Mexico

- (Puerto Rico)
- (Panama)
- (Venezuela)
- (Colombia)
- (Brazil)
- Argentina
- (Chile)

★ South America
- Sweden
- Denmark
- Germany
- Belgium
- United Kingdom
- (Ireland)
- France
- (Switzerland)

- (Ethiopia)
- (Kenya)
- (Belgian Congo)
- (Nigeria)
- (Southern Rhodesia)

★ Western Europe
- Union of Soviet Socialist Republics

★ Africa
- Turkey
- (Israel)

★ Middle East
- Japan
- China
- (Hong Kong)
- (Indo-China)
- (Philippines)
- (Indonesia)
- (Thailand)
- (Burma)
- India
- (Ceylon)
- (Pakistan)
- (Afghanistan)

★ Asia
- Australia

★ Oceania
(i) North America
   A........Canada
   B........United States
   C........Mexico
Canada

-1870-

Confederation

Capital imports start to represent an important increment to domestic capital sources.

Substantial economic progress before a truly self-reinforcing growth process.

To raise the rate of productive investment, the significant political & social restraints must be reduced.

Due to the abnormally large investment in railways for a nation of this population, & to relatively heavy foreign investment, the gross investment proportion is extremely higher than appears to mark other period.

Substantial railway building fails to initiate a take-off because of the absence of the general preconditions.

-1880-

The take-off is initiated by a narrow economic process because of the rich land & natural resources by which high levels of welfare can be achieved.

A sharp relative rise in export prices & large new capital imports create a newly favourable international environment.

-1890-

18,000 miles of railway line

-1900-

$1 billion net balance of foreign indebtedness

-1910-

Take-off

The take-off is aided by the world rise in grain prices. This rise makes attractive the laying of vast railway networks.
Export of grain is a source of ploughed-back profits. Foreign capital flows are important as lumpy overhead capital construction, of long gestation period, is required. The development of railroads serves to enlarge the export sector which generates capital for internal development.

The era of high consumption is still gathering momentum. The pattern of consumption depends upon the income elasticities of demand in their widest sense.
United States

-1790- The pre-conditions are explicitly built up

The creation of the pre-conditions is an economic & technical matter, comprising the building of social overhead capital & the finding of an economic setting in which a shift to industry is profitable

-1810- Napoleon's Invasion of Russia

-1820- The industrial boom

To raise the rate of productive investment, the significant political & social restraints must be eliminated in the South

Monroe Doctrine

-1830- There is no impact of an external challenge

The tariffs on cotton textiles

They play an important role in the take-off

The tariffs on rail iron

A sharp relative rise in export prices & large new capital imports create a newly favourable international environment

-1840- Export of grain is a source of ploughed-back profits

The upshot is marked by railway & manufacturing development mainly confined to the East, while the West & the South digest the extensive agricultural expansion of the previous decade

-1850- Take-off
The upshot is marked by a heavy inflow of foreign capital, while the great railway push is carried out into the Middle West. Foreign capital flows are important as lumpy overhead capital construction, of long gestation period, is required. Capital formation is aided by price inflation which shifts resources from consumption to profits.

The economy is run by men who know where they are going: Confident period.

The post-railway-building Age of Steel starts.

The Pennsylvania & Mid-Western coal-iron complexes are brought to life.

The rate of development, relatively to the United Kingdom, is raised because a big backlog of unapplied technology is available.
The rise of steel is the central symbol of the movement to maturity in the post-railway age. The process of moving towards maturity generates the kind of social pressures which enforce humane modifications to that process.

A shift of social objectives, rather than a drastic reallocation of resources, is brought about.

The progressive income tax, which is the most revolutionary of all forms of economic policy, is accepted. Big business curbs itself or is curbed. The trade unions are explicitly given the right to organize. The federal banking system is created, partly to exercise a degree of control over the business cycle. The public interest wins new recognition in the policy of conservation, national parks & reservations.

The muck-rakers: the doubt of industrial maturity.

The so-called Large View fails to take hold.

The resources increasingly flow into the dimensions of consumption.

The trend of high mass consumption is damped by the rise in urban living costs.
The trend of high mass consumption becomes palpable. The egalitarian bias & the traditional high wages make the trend decisive.

The rise of a new middle class: the era of the professional high mass technicians & the white & blue collar workers.

The people flow to the cities & to the suburbs. The rise of the automobile - a vast migration into new single-family houses in the suburbs, filled increasingly with radios, refrigerators & other gadgetry of a society, whose social mobility & productivity have all but wipe out personal service. Food consumption is shifted to high grade foods.

T. Dreiser: the doubt of industrial maturity.

The Great Depression breaks the hold of a generation of political leaders whose desire is to re-create a pre-1914 normalcy. It brings to power leaders who install a version of the welfare state.

The Great Depression: its length is related directly to the stage of growth. When investment comes to be centred on industries & services based on expanding consumption, full employment is needed to support full employment. Unless consumption levels press outward, capacity in consumers' goods industries & those supplying them will be under-used, & the impulse to invest will be weak.

The industry is stabilized at a lower level.

The industry is stabilized at a lower level.
A resumption of the boom of the 1920s, with a resumed march to the outer suburbs & a resumed extension of ownership for cars, refrigerators & gadgets. The economic growth can no longer continue to be based so heavily on the diffusion of standard consumer durables. In all sectors growth curves are subject to long run deceleration.

The prospect, to tidy up the situation a little & enjoy the benefits of affluence with a four day working week, is altered by the decision to have more babies. The consequent changes in the age structure of the population & in the rate of family formation are of major economic significance.

The society is less affluent than it looks. The people behave with curious new obsession with family life, privacy, do-it-yourself, getting away in caravans & motor boats, & writing impiously about the Organization Man.

The era of high consumption does not come to an end, because effective demand is sustained. Combined with the cumulative deficit in social capital & the cost of the arms race, the increase in the ratio of dependents to producers is likely to link a vigorous expansion of output with a degree of austerity at the level of private consumption.
Mexico

First World War A series of revolutions

Great Depression 1930

The development of modern cotton textile industries in substitution for imports marks the pre-take-off period

Political stabilization Nationalization of oils & minerals

Revival of foreign investment helps the take-off

Second World War Take-off

1940

1950

The economy is one of the underdeveloped countries which have passed through the take-off process

1960
(ii) South America

Puerto Rico
Panama
Venezuela
Colombia
Brazil
Argentina
Chile
Argentina

First World War

-1920-

- Substantial railway building fails to initiate a take-off because of the absence of the general preconditions
- A large quantity of foreign capital import does not initiate the take-off
- The War stimulates the growth of the modern sectors which tend to slacken afterwards
- The economy seeks to return to a pre-1914 normalcy
- To raise the rate of productive investment the significant political & social restraints must be reduced

Great Depression-1930-

- A sharp fall in terms of trade
- The challenges which require the rapid development of manufactured import substitutes
- A war-time blockage of foreign trade
- The sustained take-off is inaugurated with the structural vicissitudes of the economy
- Consumption goods produced in substitution for imports play the role of leading sector

Second World War

-1940-

-1950-

-1960-

The economy is one of the underdeveloped countries which have passed through the take-off process
Puerto Rico

The economy attempting take-off, where large injection of American funds in substruction as well as in industry takes place, & the apparent savings & investment rates come to over five per cent of net national product. Whether the take-off will be successful remains to be seen.

Panama

The economy attempting take-off, where the apparent savings & investment rates, including limited net capital imports, come to over five per cent of net national product. Whether the take-off will be successful remains to be seen.

Venezuela

A large quantity of foreign capital import does not initiate the take-off, although it contributes undoubtedly to creating the pre-conditions. The economy has been for some time an 'enclave economy,' with a high investment rate concentrated in a modern export sector whose growth does not generate general economic momentum in the economy, but in the past few years, the economy may have moved over into the category of economy experiencing an authentic take-off.

Colombia

Growing economy, where the apparent savings & investment rates, including limited net capital imports, come to over ten per cent of net national product.

Brazil

The economy is one of the underdeveloped countries which are in the midst of the take-off process. The rate of development, relatively to the West, is raised because a big backlog of unapplied technology is available.

Chile

The economy attempting take-off, where savings & investment rates, including limited net capital imports, come to over five per cent of net national product. Whether the take-off will be successful remains to be seen.
(iii) Western Europe

E. Sweden
F. Denmark
G. Germany
H. Belgium
I. United Kingdom
J. Ireland
K. France
L. Switzerland
Sweden

Congress of Vienna

--- The great transformation starts, no warfare interrupts the economic progress

-1820-

-1830-

-1840- A history of progressive liberalization of government & of economic development

-1850-

-1860-
The opening of British & French markets for timber creates a newly favourable international environment.

The take-off is initiated by a narrow economic process of the rich land & natural resources by which the high levels of welfare can be achieved.

The introduction of the railroad plays an important part in the take-off.

Export of timber & pulp is a source of ploughed-back profits. Foreign capital flows are important as lumpy overhead capital construction of long gestation period is required.

Take-off H. Ibsen (Norway): the doubt of industrial maturity.

The timber industry, built on the steam saw, plays the role of leading sectors because it involves the application of modern processing techniques.

The turning point into maturity: the beginning of a phase of differentiation of production. A depression is marked by a sagging of the export markets.

The take-off is a surge in output in a few sectors. It is in the nature of investment that these sectoral surges should be overdone. It then becomes necessary for the economy to re-group, re-allocate its resources, & resume growth in new leading sectors. One of the measures of whether take-off has been achieved is a society's ability to redeploy in this way.

The positive response takes place. A shift from timber into woodpulp, from the export of unplanned to planned board & to matches.

The Norland ores begin to be exploited by modern methods.
The economy moves sharply towards the welfare state, basically because it is not agrarian in its political balance, & there is the great weight of socialist doctrines & ideals within the industrial working force & among intellectual leaders. There is a surge from pig iron into highly refined steel & engineering industries.

Hydro-electric power is exploited, laying the basis for a highly skilled electrical industry which is to help the railways to convert to electricity from coal.

The economy faces severe problems of reconstruction & readjustment, & it does not proceed straight away into the age of consumer durables. The Great Depression breaks the hold of a generation of political leaders whose desire is to re-create a pre-1914 normalcy. The rise of the new regime imposes a quite different set of imperatives. Rearmament becomes a factor in the recovery. Imports are substituted by domestic manufactured goods. The economy is ready for the welfare state or the age of durable consumer goods.

The lag in the shift to the road can be accounted for by lack of capital for road building, by the monopolistic power of the railways & the pressure of the government.

The technical, political & sociological obstacles are cleared away & the society behaves in a remarkably "American" manner. The pattern of consumption depends on the income elasticities of demand in their widest sense.
Denmark

Congress of Vienna

Formation of a modern national state

1820

1830

1840

1850

1860

Close relationship to the other European nations

The pre-conditions are actively established by introducing modern techniques

Prussia-
Danish War -1850-
The end of subsistence economy

The shift to meat & dairy products reinforces the development of a manufacturing sector in the economy as well as provides a major source of foreign exchange, because it involves the application of modern processing techniques.

H. Ibsen (Norway): the doubt of industrial maturity
The society moves sharply towards the welfare state, basically because it is not agrarian in its political balance, & there is the great weight of socialist doctrines & ideals within the industrial working force & among intellectual leaders.

The economy faces severe problems of reconstruction & readjustment, & it does not proceed straight away into the age of consumer durables.

The only period of normal prosperity which restores 1913 levels of output. This failure to expand corresponds to a failure to make the logical move into the normal stage of growth beyond maturity.

The Great Depression breaks the hold of a generation of political leaders whose desire is to re-create a pre-1914 normalcy. The rise of the new regime imposes a quite different set of imperatives. Rearmament becomes a factor in the recovery.

The government begins to create an environment of greater prosperity. Then income elasticities of demand express themselves in a disproportionate rise in demand for consumer durables & services.

Because of the lack of strong egalitarian bias & traditional high wages, the worker takes slowly to the idea that the gadgets, travel & other services are really for him.

The technical, political & sociological obstacles are cleared away & the society breaks out into the phase of durable consumers' goods & services. The society behaves in a remarkably "American" manner.

The era of high consumption is still gathering momentum. The pattern of consumption depends upon the income elasticities of demand in their widest sense.
A nationalism based on past humiliation & future hope makes the preconditions. Junkers & the West Germans share one solid common conviction that they have a stake in the creation of an independent modern state.

The introduction of the railroad is the strong initiator of the take-off. The enlargement & modernization of armed forces constitute a leading sector.

The post-railway-building Age of Steel starts.
The rise of steel is the central symbol of the movement to maturity in the post-railway age.

The Ruhr coal-iron complex is brought to life.

The confident period: the economy is run by men who know where they are going.

The rate of development, relatively to the United Kingdom, is raised because a big backlog of unapplied technology is available.

The process of moving towards maturity generates the kind of social pressures which enforce humane modifications to that process.
1910- Maturity 
The economy moves sharply towards the welfare state, basically because it is not agrarian in its political balance, & there is the great weight of socialist doctrines & ideals within the industrial working force & among intellectual leaders.

1920- 
The economy faces severe problems of reconstruction & readjustment, & it does not proceed straight away into the age of consumer durables.

1930- Great Depression 
The only period of normal prosperity which restores 1913 levels of output. This failure to expand corresponds to a failure to make the logical move into the normal stage of growth beyond maturity.

1940- Second World War 
The Great Depression breaks the hold of a generation of political leaders whose desire is to re-create a pre-1914 normalcy. It brings the breakdown of the system implicit in the Versailles Settlement & creates the regime which opts for a quite different use of the potentialities of mature economies; military expansion.

1950- High mass consumption 
The lag in the shift to the road can be accounted for by lack of capital for road building, by the monopolistic power of the railways & the pressure of the governments, by the later start with the concept of the mass produced car for the mass market, by the shortage of cheap suburban housing sites.

1960- 
Because of the lack of strong egalitarian bias & traditional high wages, the worker takes slowly to the idea that the gadgets, travel & other services are really for him.

The technical, political & sociological obstacles are cleared away & the society breaks out into the phase of durable consumers' goods.

The era of high consumption is still gathering momentum.
Belgium

- Congress of Vienna

- 1820-

- 1830---Formation of a modern national state

- 1840-

- 1850-

Crystal Palace Exhibition

- 1860-

The perpetual neutrality is guaranteed

Take-off Great strides in the mining industry promote the take-off
The rise of steel is the central symbol of the movement to maturity in the post-railway age.

The rate of development, relatively to the United Kingdom, is raised because a big backlog of unapplied technology is available.

The rapid industrialization of the economy leads to labour unrest.
The economy moves towards the welfare state, because it is not agrarian in its political balance & there is the great weight of socialist doctrines & ideals within the industrial working force & among intellectual leaders.

The economy faces severe problems of reconstruction & readjustment, & it does not proceed straight away into the age of consumer durables.

The only period of normal prosperity which restores 1913 levels of output. This failure to expand corresponds to a failure to make the logical move into the normal stage of growth beyond maturity.

The Great Depression breaks the hold of a generation of political leaders whose desire is to re-create a pre-1914 normalcy. The rise of the new regime imposes a quite different set of imperatives. Rearmament becomes a factor in the recovery.

The government begins to create an environment of greater prosperity. Then income elasticities of demand express themselves in a disproportionate rise in demand for consumer durables & services.

Because of the lack of strong egalitarian bias & traditional high wages, the worker takes slowly to the idea that the gadgets, travel & other services are really for him.

The technical, political & sociological obstacles are cleared away & the society breaks out into the phase of durable consumers' goods & services. The society behaves in a remarkably "American" manner.

The era of high consumption is still gathering momentum. The pattern of consumption depends upon the income elasticities of demand in their widest sense.
United Kingdom

South Sea -1720- Bubble

-1730--- The development of the cotton-textile industry starts explicitly

-1740-

-1750--- The pre-conditions are very fully developed. Progress in a number of industries are considerable throughout the eighteenth century & the social & institutional environment is propitious

-1760--- Substantial earlier progress before a self-reinforcing growth
There is no impact of an external challenge on the industry. The creation of the pre-conditions is an economic & technical matter, comprising the building of social overhead capital & the finding of an economic setting in which a shift to industry is profitable.

The Black Country coal-iron complex is brought to life. Exhaustion of charcoal supply creates a need of shift to new industries in new districts.

The substantial improvements in the banking system do not initiate a take-off.

The original sector of primary growth is cotton textile which is large in relation to the whole economy, & of which evolution is consequently a massive fact with wide secondary repercussions on the development of urban areas or the demand for coal, iron, & machinery, for capital & transport. Its technological developments bring a sharp reduction in real costs & prices, therefore, tap a source of effective demand for rapid expansion.

The steel industry rises from the railways & the railways arise from the requirements of cotton textile.

The take-off is based almost wholly on domestic sources of finance. Capital formation is aided by price inflation which shifts resources from consumption to production.
Higher -- The economy is run by men who know where they are going: Confident period.

The process of moving towards maturity generates the kind of social pressures which in turn enforce humane modifications to that process.

The Golden Age of Victorian Industrial Prosperity. The post-railway-building Age of Steel starts -- 1860.

-1850- Maturity

-1840- Mines Act

-1830- Ten Hours Act

-1820- Crystal Palace Exhibition

-1810- Corn Laws
The relative rate of the development slows down, because only a rough approximation to the new technology created in the previous year is available. The late comers have a big unapplied backlog of technology available.

The Fabian Society: the doubt of industrial maturity

The economy does not move faster from technical maturity into the age of high consumption, because:

1. Maturity is a matter of virtuosity & the spread of technique on the supply side. The real income per capita rises, but in the form of more & better food, clothing, housing, public utilities & transport. The bicycle boom begins the age of consumer durables, but is then interrupted by the wars.

2. The country is a major industrial region in the world economy. Capital & manpower are drawn to the point of expected higher private yield & real wages. In spending capital abroad to open up farming territories or building railways, the economy obtains invisible imports in the short run & cheaper supplies of primary goods in the long run, but it benefits mostly the whole world trading area.

3. The timing of the stages of growth is affected by intervals when resources are devoted to war, diverted to gold mining, or wasted because public policy fails to create the conditions for a regular movement forward.
The process of moving towards maturity generates the kind of social pressures which in turn enforce humane modifications to that process.

The Great Depression breaks the hold of a generation of political leaders whose desire is to re-create a pre-1914 normalcy. It brings to power governments that build prosperity of a sort on housing, the devaluation of 1931 & Empire Preference.

The technical, political & sociological obstacles are cleared away & the society breaks out into the phase of durable consumers' goods & services. The society behaves in a remarkably "American" manner. The era of high consumption is still gathering momentum. The pattern of consumption depends upon the income elasticities of demand in their widest sense.
France

Congress of Vienna

-1820-

An agricultural economy

July Revolution

-1830-

The close relationship to the United Kingdom makes the take-off early

-1840-

Take-off

Crystal Palace Exhibition

-1850-

The post-railway-building Age of Steel starts

-1860-
The rise of steel is the central symbol of the movement to maturity in the post-railway age.

European Slump

The rate of development, relatively to the United Kingdom, is raised because a big backlog of unapplied technology is available.

The social structure & the family pattern hinder the economic growth. Lack of coal-iron complex is a fatal cause for a slow economic development.

-1910- Maturity
First World War

1910- Maturity With stagnant population, a five per cent investment rate yields substantial growth in real output per capita. The economy moves towards the welfare state, because it is not agrarian in its political balance & there is the great weight of socialist doctrines & ideals within the industrial working force & among intellectual leaders.

1920-

The economy faces severe problems of reconstruction & readjustment, & it does not proceed straight away into the age of consumer durables.

Great Depression-1930-

The only period of normal prosperity which restores 1913 levels of output. This failure to expand corresponds to a failure to make the logical move into the normal stage of growth beyond maturity.

The Great Depression breaks the hold of a generation of political leaders whose desire is to re-create a pre-1914 normalcy. It brings to power a Popular Front government. The rise of the new regime imposes a different set of imperatives. Rearmament becomes a factor in the recovery.

Second World War

1940-

The lag in the shift to the road can be accounted for by lack of capital for road building, by the monopolistic power of the railways & the pressure of the government, by the later start with the concept of the mass produced car for the mass market, by the little availability of cheap suburban housing sites.

1950-

The technical, political & sociological obstacles are cleared away & high mass the society breaks out into the consumption phase of durable consumers' goods.

1960-

The era of high consumption is still gathering momentum.
Ireland In the eighteenth century, making a virtue of fecklessness, the oppressed Irish react to the intrusion of a more advanced power. The economy is regarded as the pre-take-off society, where the population pressure is generated not only by the easy spread of highly productive measures of public health but also by the easy acceptance of high-yield new crops, permitting a fragmentation of land-holdings, earlier marriage & a rise in the birth rate.

Switzerland The economy relies almost wholly on the skill, motivation & energy of the people. The impetus comes from handicrafts and tourism.
(iv) Africa

†........Ethiopia
†........Kenya
†........Belgian Congo
†........Nigeria
†........Southern Rhodesia
Ethiopia  The pre-take-off economy, where the apparent savings & investment rates, including limited net capital imports, come to under five per cent of net national product.

Kenya  The pre-take-off economy, where the apparent savings & investment rates, including limited net capital imports, come to under five per cent of net national product.

Belgium Congo  The enclave economy, where the apparent savings & investment rates, including substantial net capital imports, come to over ten per cent of net national product, but the domestic pre-conditions for sustained growth have not been achieved. The economy, associated with major export industries, lacks a political, social & institutional framework which exploits the impulses to expansion in the modern sector. Currently, a large quantity of foreign capital import does not initiate the take-off, although it contributes undoubtedly to creating the pre-conditions.

Nigeria  The enclave economy, where net capital imports are large.

Southern Rhodesia  The enclave economy, where the apparent savings & investment rates, including substantial net capital imports, come to over ten per cent of net national product, but the domestic pre-conditions for sustained growth have not been achieved. The economy, associated with major export industries, lacks a political, social & institutional framework which exploits the impulses to expansion in the modern sector.
Eastern Europe

K. Union of Soviet Socialist Republics
Union of Soviet Socialist Republics

A series of military intrusions & defeats are the great engine of change.
The pre-conditions start explicitly
The traditional coalitions among
the commercial middle class, the
more enterprising civil servants
& soldiers share one solid common
conviction that they have a stake
in the creation of an independent
modern state
The substantial economic progress
before a truly self-reinforcing
growth process
K. H. Marx: the doubt of industrial
maturity
The substantial improvements in the
banking system do not initiate a
take-off
The introduction of the railroad is
the strong initiator of a take-off
Tariffs are imposed. They play an
important role in the take-off
The take-off is aided by the world
rise in grain prices. This rise
makes attractive the laying of
vast railway networks
A sharp relative rise in export
prices & large capital imports
create a newly favourable interna-
tional environment
Export of grain is a source of
ploughed-back profits
Foreign capital flows are important
as lumpy overhead capital con-
struction, of long gestation period,
is required
The substitution of government
bonds for the great landholders'
claim on the flow of rent payments
redistributes income into the hands
of men more inclined to seek
material advance & to accept
innovations
Industrial output as a whole
increases on the average at about
eight percent per annum
The enlargement & modernization of
armed forces constitute a leading
sector
Take-off

With its multiple impact on growth, the railway finishes the take-off. Coal, iron & engineering surge to meet the expanded home demand. The Baku petroleum field expands to its natural limit & the Ukrainian coal-iron complex is brought to life.

First World War

Great Depression 1930

Expulsion of Trotsky 1920

First Five Year Plan 1928

Second World War 1940

The rate of development, relatively to the West, is raised because a big backlog of unapplied technology is available.

The process of moving towards maturity generates the kind of social pressures which in turn enforce humane modifications to the process.

The process of moving towards maturity generates the kind of social pressures which in turn enforce humane modifications to the process.

The process of moving towards maturity generates the kind of social pressures which in turn enforce humane modifications to the process.

Maturity is when the backlog of accumulated technological possibilities include developments in aeronautics, electronics & atomic energy.

The economy is run by men who know where they are going—Confident period: the broad pattern of economic growth under the communist leadership.

A drive to maturity: the process of industrial differentiation.

The post-railway age: the age of steel, machine tools, chemicals & electricity.

Three special aspects:

1. The government damps the rise in consumption & concentrates on capital outlays in agriculture & transport. (2) Despite large capital outlays in agriculture & transport, the metal-using industries are not given a disproportionate emphasis opposed to housing, textiles or transport. (3) The surge to maturity comes when the backlog of accumulated technological possibilities include developments in aeronautics, electronics & atomic energy.

The process of moving towards maturity generates the kind of social pressures which in turn enforce humane modifications to the process.

Stalin's Death 1953

Death 1960

With its multiple impact on growth, the railway finishes the take-off.
Middle East

Turkey

Israel
Turkey

First World War

1920

Great Depression-1930

Against the background of industrialization, the take-off is inaugurated.
Consumption goods produced in substitution for imports play the role of leading sector.

Second World War

1940

Take-off

1950

The economy is one of the underdeveloped countries which have passed through the take-off process.
Remarkable increase in agricultural income & productivity.
It remains to be seen whether the take-off will constitute a transition to self-sustained growth, & whether the society can overcome its structural problems.

1960
The economy relies almost wholly on the skill, motivation & energy of the people as well as on huge gifts & investments, from the United States & world-wide Jewish community.
(vii) Asia

M.........Japan
N.........China
H.........Hong Kong
H.........Indo-China
H.........Philippines
H.........Indonesia
H.........Thailand
H.........Burma
O.........India
H.........Ceylon
H.........Pakistan
H.........Afghanistan
Japan

-1820-
-1830-
-1840-
-1850-
-1860-

Opium War
Admiral Perry's Seven Black Ships

Their demonstration effects cast the die

The transitional coalition between the Samurai & the grain merchants, who share one solid common conviction that they have a stake in the creation of an independent modern state

Agricultural dynamism alone cannot lift the economy into take-off
With cohesion, promptness & vigour, the Japanese react to the intrusion of a more advanced power.

Capital formation is aided by price inflation which shifts resources from consumption to production. The take-off is based almost wholly on domestic sources of finance. The substitution of government bonds for the great landholders' claim on the flow of rent payments redistributes income into the hands of men more inclined to seek material advance & to accept innovations.

A whole series of new industries take hold, initially sparked by government initiative, but turned over to private enterprise as new men emerge ready to carry responsibilities & risks. The take-off is built on railway, on shipbuilding, on cotton, on silk cultivation & manufacture, on coal & pig iron, & finally on a surge of military outlays helping to build up the engineering industry.

Export of silk is a source of ploughed-back profits. Moreover, the silk industry plays the role of leading sector, because it involves the application of modern processing techniques, & because of its secondary effect which requires for uniform high grade yarn in developing modern production techniques.

Modern industrial sector is still small & largely dominated by textiles.
- 1910 -
First World War

- 1920 -

The remarkable purposeful forward surge to maturity, in which a relatively narrow array of natural resources is harnessed by a diligent population to the best that modern technology can offer, is brought about World War I stimulates the economy. The modern industrial sector starts to fan out into chemical fertilizers, steel, & electrical equipment

- 1930 -
Great Depression

The Great Depression breaks the hold of a generation of political leaders whose desire is to re-create a pre-1914 normalcy. It brings about the regime which fosters military expansion

- 1940 -
Second World War

The engineering industries come into their own, under the stimulus of Manchuria & of war outlays & preparations. The value of output in metals, machinery & chemicals comes to outrank textiles

- 1950 -

The society breaks out into the phase of durable consumers' goods & services. The society behaves in a remarkably "American" manner. The era of high consumption is still gathering momentum. The pattern of consumption depends on the

- 1960 -

High mass income elasticities of demand in their widest sense
By slowly & reluctantly altering its traditional characteristics, the people react to the intrusion of a more advanced power. The population pressure is generated not only by the easy spread of highly productive measures of public health but also by the easy acceptance of high-yield new crops, permitting a fragmentation of landholdings, earlier marriage & a rise in the birth rate. Substantial railway building fails to initiate a take-off because of the absence of the general preconditions. The development of modern cotton textile industries in substitution for imports marks the pre-take-off period. The economy attempting purposefully to take-off under the national plan. The First Five Year Plan: the agricultural policy may fail to produce the minimum structural balance required for a successful take-off, requiring radical revision of investment allocations & policy objectives at a later stage. All non-governmental pools of capital is systematically transferred into the hands of the state. It is drawing heavily for capital resources on the mass of peasants. Exports to the communist bloc wrung at great administrative & human cost from the agricultural sector, are a source of ploughed-back profits. The enlargement & modernization of armed forces constitute a leading sector. The rate of development, relatively to the West, is raised because a big backlog of unapplied technology is available.

We cannot judge whether the take-off efforts are successful or not.
The development of export sectors does not create capital formation because their proceeds are used to finance bullion imports.

Substantial railway building fails to initiate a take-off because of the absence of the general pre-conditions.

The development of modern cotton textile industries in substitution for imports marks the pre-take-off period.

The economy attempting purposefully to take-off under the national plan.

The First Five Year Plan: the take-off is defined ex ante in national product terms.

The sectoral composition of the process is not fully worked out.

To fulfill the full requirements for take-off, the achievement of industrial momentum is needed.

To a limited extent, the economy relies on income transfer by the route that a certain confiscation effect affects the feudal landlords and the real value of the government bonds exchanged for land depreciates.

The rate of development, relatively to the West, is raised because a big backlog of unapplied technology is available.

The economy is one of the underdeveloped countries which are in the midst of the take-off process.

We cannot judge whether the take-off efforts are successful or not.
<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hong Kong</td>
<td>The economy relies almost wholly on the skill, motivation &amp; energy of the people who have performed a kind of economic rope trick, climbing into industrialization with virtually no visible means of support.</td>
</tr>
<tr>
<td>Indo-China</td>
<td>The pre-take-off economy, where the apparent savings &amp; investment rates, including limited net capital imports, probably come to under five per cent of net national product.</td>
</tr>
<tr>
<td>Philippines</td>
<td>The economy attempting take-off, where savings &amp; investment rates, including limited net capital imports, come to over five per cent of net national product. Whether the take-off will be successful remains to be seen.</td>
</tr>
<tr>
<td>Indonesia</td>
<td>The pre-take-off economy, where the apparent savings &amp; investment rates, including limited net capital imports, probably come to under five per cent of net national product.</td>
</tr>
<tr>
<td>Thailand</td>
<td>The pre-take-off economy, where the apparent savings &amp; investment rates, including limited net capital imports, probably come to under five per cent of net national product.</td>
</tr>
<tr>
<td>Burma</td>
<td>The enclave economy, where net capital imports are large.</td>
</tr>
<tr>
<td>Ceylon</td>
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<td>The pre-take-off economy, where the apparent savings &amp; investment rates, including limited net capital imports, probably come to under five per cent of net national product.</td>
</tr>
</tbody>
</table>
(viii) Oceania

P.........Australia
- First World War —
- Second World War —
- Great Depression —
- Take-off —
- High Mass of Foreign Trade —
- A war-time blockage of foreign trade —
- The take-off is initiated by a narrow economic process because of the rich land & natural resources by which the high levels of welfare can be achieved.
- The meat industry is a substantial manufacturing sector.
- Consumption goods produced in substitution for imports play the role of leading sector.
- The challenges which require the rapid development of manufactured import substitutes.
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- The challenges which require the rapid development of manufactured import substitutes.
These case studies carry very important implications for today. The variety of sectoral patterns in the drive to maturity needs emphasis in the world where so many nations are seeking take-off.

Very few nations have been endowed with a Pennsylvania, a Ruhr, a Black Country or a Ukraine. Most have some narrower range of natural resources. Some must rely almost wholly on the skill, motivation and energy of their people. However, the minds of the leaders of the underdeveloped countries are likely to be filled with visions of the American, German and Russian patterns rather than the probably more relevant Swedish and Japanese patterns.
CHAPTER IV.
THE APPLICATION OF PROFESSOR ROSTOW'S INTERPRETATION

1. Policy Views

2. Criticism of the Marxian Standpoint

"The best decisions are neither bought nor sold. They are the result of disagreement, where the last word is not 'I admit you're right,' but 'I've got to live with the s. o. b., haven't I?"

---Charles Curtis
IV. The Application of Professor Rostow's Interpretation

The past is on top of us and with us all the time, and there is only one way of mastering it, by knowing how these things have come to be. Professor Rostow's dynamic theory which helps to understand their nature, character, and their correlation to the present realities of life, ultimately gives us cogent ideas to provide a policy perspective on world economic development, and to counterpoise the Marxian interpretation of economic dynamics.

1. Policy Views

In a process of modern development, first the United Kingdom, then France, Belgium, the United States, Germany, Sweden, Denmark, Japan, Canada, Australia and the Union of Soviet Socialist Republics have matured economically. Mexico, Argentina and Turkey are likely to be the followers. China, India and Yugoslavia may come next. Burma, Nigeria, the Belgian Congo, Southern Rhodesia, Colombia, Bolivia and Ecuador are not far behind the forerunners. Puerto Rico, Panama, Venezuela, Peru, Brazil, Chile, Iran and the Philippines are actually attempting to "take-off," and even countries now in the "pre-take-off" stage, such as Indo-China, Thailand, Indonesia, Ceylon, Pakistan, Afghanistan, Iraq, Egypt, Ethiopia, Kenya and Ireland will sooner or later achieve
their "take-off."

In sixty years' time, the world ought to contain many newly mature nations who are able to apply to their resources the full range of science and technology. Compound interest will continue to operate in the mature societies, however, for the first time the arena of power will be likely to become truly global. With respect to this situation, we have to face two difficult problems. On the one hand, it is a question of how to understand and how to deal with that great empire—the Union of Soviet Socialist Republics. And on the other hand, it is the problem of how to deal with a number of countries which are presently underdeveloped but are certain to become mature.

(i) The Union of Soviet Socialist Republics

Technically, structurally and psychologically, the Union of Soviet Socialist Republics is nowadays ready for the age of high mass consumption, which means its dangerous age. Seven years ago, Professor Rostow explained the situation as under:¹

"Without change or conflict at the top of the Soviet structure we can expect no dramatic overt reflection of those forces, all of which have arisen from the dynamics of Soviet evolution but lie outside the capabilities of the regime wholly to control. The stability of Soviet policy since...

the mid-1930's is artificial. It represents a complete short-term tactical success in maintaining the pattern of Soviet rule; but this success has been achieved by holding in check or frustrating forces and attitudes which are not diminishing but are probably gaining in strength as a secondary consequence of that pattern of rule. It would be dangerous to underestimate the capabilities of the Soviet regime to maintain domestic order so long as it maintains a minimum unity at the top, and, in particular, so long as the secret police continues in existence as an effective agent of the regime. Nothing in this analysis justifies an easy optimism concerning the timing of a change in the Soviet system or concerning the process of transition. Nor will such change necessarily and automatically work in the interests of the United States and common humanity everywhere. On the other hand, it is important to recognize the existence of these deeper forces and to take those actions which would maximize the change that their ultimate coming into play contribute to the development of a more peaceful and stable world, and thus accord with our own interests."

In respect of both the start of their take-off and their arrival at maturity, the Soviets are about five decades behind those of the United States.² By capitalizing

on a big unapplied backlog of technology, they have been developing at enormous speed. Their economic strength and potentiality must be very great, because to reach their present maturity they have surmounted the difficulties of a traditional society with intractable problems of land tenure, an illiterate serfdom, over-population on the land, the lack of a free-wheeling commercial middle class, and a culture which initially placed a low premium on modern productive economic activity. Moreover, they have done this work with low per capita consumption, against a background of the two World Wars and the Great Depression.

This rapid and strong economic accomplishment has been carried out by constraints imposed by the state; and the concentration of its investment in heavy industry and industry related to military forces has made the development possible.

Judging from Professor Rostow's theory of growth, the Union of Soviet Socialist Republics has been doing the same thing that Germany and Japan did a generation ago, but possibly in a slightly larger scale. Now the Russian Government is caught up in the three-way choice: To expand high mass consumption into the range of durable consumer goods and services? To assert the status and power of the new mature society on the world scene by military adventures? To enhance human dignity and freedom?
As discussed previously, usually maturity is a time of dangerous as well as promising choices. But so far as the Union of Soviet Socialist Russia is concerned, the situation is more serious than ever. Professor Rostow explains it as follows:

"In terms of the stages of growth, Russia is seeking to convert its maturity into world primacy by postponing the advent of high mass consumption. But it is doing so not because its prospects of victory over the West are all that good; not because its security could not be more cheaply and effectively insured; not because it is its national interest to continue the arms race--but because communism is a curious form of society appropriate only to the supply side of the growth problem, and likely to wither in the age of high consumption."

For making up a policy for dealing with this great empire in the time of danger, two aspects should have been taken into account. In the first place, the Union of Soviet Socialist Republics has performed a selective and purposeful feat, in the matter of rates of growth, by devoting a radically higher proportion of investment to heavy industry; but a variety of forces are making for deceleration. This new phenomenon can be observed in their latest figures for projected expansion. In the second place, an enormous, fast-growing heavy industry is not a goal in itself, nor is it an intrinsic international advantage, therefore the composition of their output will definitely be changed. The allocation of economic resources

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3 Walt Whitman Rostow, "Rostow on Growth; A Non-Communist Manifesto," Lectures delivered at the University of Cambridge, Economist, August 22, 1959, p. 526.
must change because of the infiltration of consumers' goods into the society. Then, the economic structure and the rates of growth will move closer to those of the high mass consumption economies.

With this understanding in mind, two policies are appropriate for making the Soviets give up world power. The first policy is to try to make their choice of attempted world dominion so unattractive to the Russians as to be unattainable. The second policy is to strive to make their choice of a high mass consumption economy as easy and as natural as possible. As a matter of fact, the West must demonstrate certain things, to persuade the Russians to face the fact of the diffusion of power and accept the stage of high mass consumption. The West should not let them get far enough ahead to make a temporary military resolution rational, and the West should help the underdeveloped countries to move into take-off within the democratic orbit.

The Union of Soviet Socialist Republics is a big country to have come to material maturity so late, but it knows that other big countries are gradually coalescing towards single states. As with the leaders of Germany and Japan in the last generation, therefore, the leaders of the Union of Soviet Socialist Republics may feel dimly and resentfully aware that the only
rational alternative to bidding for world domination will eventually be to accept a status as one middling nation-state among several.

Finally, no specially mysterious attributes must be ascribed to the Russian economy. From Professor Rostow's dynamism, it is simply a great nation with considerable endowments for creating modern economy and society. The organization's domestic imperatives and external ambitions have produced a version of the common experience of growth which is abnormally focused on heavy industry and military potential. The question is whether the West can mobilize Russian ample resources to do the tasks that must be done. In other words, it is a matter of spirit, intellect, will and insight. Whether the policy of the West for releasing Russian resources to increase human dignity and freedom, social welfare and international security, is bringing about good results or not, might be judged from the structural changes in the Soviet economy. What should be watched are the specific allocations of their resources.

(ii) The Underdeveloped Countries

We are in the midst of a great world transition. Outside North America, Western Europe, Japan and Oceania, and even in parts of those areas, until recently the pattern of society remained essentially fixed in the mold of low-productivity rural life centred on isolated villages.
Within the past forty years the two world wars and enormous improvements in communications have fundamentally altered the perspective of hundreds of millions of people. This revolution is rapidly exposing previously apathetic peoples to the possibility of change. The world community is becoming both more interdependent and more fluid than it has been at any other time in our history, and at the same time it presents both a great danger and a great opportunity. The danger is that increasing number of people will become convinced that their new aspirations can be realized only through violent change and the renunciation of democratic institutions, and since the communists have recognized their opportunities to exploit the revolution of rising expectations by picturing communism as the road to social opportunity or economic improvement, this danger is increased by the existence of communism.

Thus, it is an urgent necessity to make up a policy on the problem of how to deal with a number of the presently underdeveloped countries. With respect to this point we must notice that although China might be regarded as one of the exceptions, her future depends greatly upon the policy of the West. The next paragraph

indicates the situation.

"A unified, confident, ambitious group of men deeply committed to the use of totalitarian techniques have mastered mainland China. They are driven on by their internal and external ambitions to industrialize rapidly and expand the modern units of their armed forces. They are driven on by the requirements of these tasks combined with their ideological commitment to total political control to employ techniques which may or may not be consistent with their aims. They face in the coming years a decisive passage of modern history at a time of intense power struggle in which they are caught up two ways: in the Sino-Soviet Alliance, and in the interaction of China and the rest of Asia. Thus, despite the unique powers the Communist regime exercises on the mainland, its fate rests substantially with the peoples of the Free World and their government."

At the same time, this policy making is absolutely important to persuade the Russians to face the fact of the diffusion of power and accept the age of high mass consumption, because now the underdeveloped countries are the main focus of communist hopes. If the West could be successful in pushing them into take-off within the democratic orbit, the Union of Soviet Socialistic Republics would not be able to maintain its hope of world domination by communist military aggression.

Any detailed policy to serve the purpose of developing the underdeveloped economies must be based upon an understanding of the economic problems these countries face, and of the possibilities and limitations of the influence outsiders can exert in helping them to solve these problems. No two of these countries are alike, and
the problems of growth will be shaped in each by its resources, its culture, its history, and its political institutions. Nevertheless, as I have suggested, there is a recognition that there are common elements in the patterns of development of different countries, posing common implications for development policy everywhere.

To establish the pre-conditions of growth and to make sure that growth is maintained, the underdeveloped countries need capital; and to make effective use both of their domestic meagre capital and of capital from abroad, they need technical assistance. One of the most noteworthy points in the development policy for the underdeveloped countries in connection with Professor Rostow's dynamics is that the capital and technical assistance from the developed countries must reflect the different stages of growth of the policy objects.

The economies in a "traditional" stage can make productive use of substantial outside capital only in a few fields like transport, irrigation, mining, and power. The amounts of capital absorbed in agriculture and industry are very small. The economies in a "transitional" stage have more opportunities for productive investment, although their capacity for capital absorption is limited. This capacity depends on such factors as the technical and managerial capacity available, the size, stability
and motivations of the non-agricultural labour force, the level of skills and education, the development of markets, the state of basic facilities for transport, communications, power, and community services. The economies in the take-off phase have new problems; how much of its output is the economy willing to set aside for investment and how much can it borrow in normal international capital markets?^ In this matter of the relationship between the stages of growth and international assistance, several points have to be taken into account. The investment in the production of raw materials for export depends for its productivity not on the domestic market but on the level of demand in international markets. The risks of investment in the underdeveloped countries are related with the question of whether the economy will grow continuously in the future. As a matter of fact, nobody can predict when the take-off will occur. But as soon as the country succeeds in taking-off, its own output can generate the substance to plow back into its own capital formation, and favourable profit prospects emerge, so that the requirement for foreign capital is reduced.6

Another significant indication which Professor Rostow's theory suggests is that there is a particularly critical period in the process of economic development of every country which determines whether the country will develop into a self-sustained growth with expanding levels of welfare or sink back into economic stagnation. The former case creates the hope for the development of mature democracy, and the latter case induces economic instability and political chaos. This critical difference between an upward development and a downward stagnation is often determined by foreign capital aid.

No doubt these are not the only things that have to be considered in forming the policies, because there are many complex problems. For instance:

"Most important, perhaps, the total problem of East-West relationships is complicated by deep, often unconscious, issues of race and colour. The intensity of certain anti-Western and anti-American reactions of the part of Asians is undoubtedly caused by fierce underlying resentment of real or believed attitudes of racial superiority in the West."

Or,

"Americans generally think of Communism as a purposeful conspiracy to maintain itself in power where it has already seized power and to expand its power to the limit compatible with the security of its existing bases. --- It is essential for us to understand that the Asian image of Communism is very different from ours; and that an effective effort to build and

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sustain an alliance must recognize and cope with these special attitudes of mind."

In summary, then, the Western policy towards the underdeveloped countries should aim at making the dissipation of the nationalist impulse in eventual external aggression as unattractive and difficult as possible, and making the building of the domestic economy on the smooth modernization of the society as easy as possible. For realizing these purposes, the needs are: much capital aid; a continuing joint organization for applying the aid funds and for giving opportunities to the leaders of the underdeveloped countries to be mixed up co-operatively with the developed countries' leaders; much tactfulness, because of the variety of the underdeveloped countries; the application of a free import policy to their manufactured goods, by reason of the urgency of their search for markets; and emancipation of colonies. Carrying out these policies is not a matter for one single developed country, therefore, a new international partnership program for world economic growth is proposed. Judging from the previous study of dynamics of world economic development, the purposes of this program must be threefold; making available sufficient capital to permit the under-

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developed countries to launch an ultimately self-sustaining process of economic development; stimulating and assisting the underdeveloped countries to overcome obstacles to their own development other than lack of capital; and creating a climate of international economic activity in which the economies of the developed countries of North America, Western Europe, Japan and Oceania could continue to grow.

According to Professor Rostow's theory, the underdeveloped countries would be divided into three categories. The countries in the traditional stage should be offered an expanded volume of technical assistance and such capital as they could demonstrate they are ready to use. What is needed is that the aid would be on a grant basis. The countries in the transitional stage should be offered continuing technical assistance and as much capital as they could absorb. As long as the aid meets the agreed criteria of productivity, it should be borrowed at favourable rates of interest on a long-term basis. The countries in take-off should be offered foreign capital, judging from the view-point of credit-worthiness, in connection with international sources of capital.

And with respect to these policy views, ten characteristics might be pointed out: first, every request for assistance which meets the criteria of productivity would
be granted; second, it is designed to provide maximum incentives to the governments of the underdeveloped countries to take the steps necessary to promote development and thus make their countries eligible for assistance; third, economic growth in many countries would depend more on the development of absorptive capacity than on the availability of capital funds, therefore, the program should provide for the expansion of absorptive capacity; fourth, the recipient countries must be convinced that the program does not have narrowly political or military objectives; fifth, it is as important to have agreed positive criteria of eligibility as it is not to apply wrong criteria; sixth, sponsorship should be international rather than national; seventh, the incentive effects of the plan will be much more pronounced if it is applied on a world scale than if it is limited to one or two regions of the world; eighth, the program will have very little incentive effect if it is not assured of continuity over a number of years; ninth, though the underdeveloped countries will establish home industries and will become somewhat more self-sufficient, they must not develop as autarchies; and tenth, there are agricultural resources which with a little intelligent planning could be made to play a much more important part in international efforts to promote development than it has done to date, e. g.
by the productive use of agricultural surpluses.\textsuperscript{10}

It seems that a much-expanded long-term program of the developed countries' participation in the economic development of the underdeveloped countries is one of the few concrete instruments available for achieving the twofold results of increasing the awareness elsewhere in the world that the goals, aspirations, and values of the developed countries' people are in large part the same as those of peoples in the underdeveloped countries, and developing viable, energetic, and confident democratic societies through the whole world.

2. Criticism of the Marxian Standpoint

One century has passed since Karl H. Marx made public his great theory. Actually it had a validity in a certain period of the world economic history, however, as J. Maynard Keynes said a year before the publication of "The General Theory of Employment, Interest and Money," Karl H. Marx surely "invented a certain method of carrying on and a vile manner of writing, both of which his successors have maintained with fidelity," but we can discover "nothing but out-of-date controversialising"\textsuperscript{11} in

\textsuperscript{10} Walt Whitman Rostow, Max F. Millikan, Paul N. Rosenstein-Rodan & others, A Proposal; Key to an Effective Foreign Policy, Center for International Studies, M. I. T., New York, Harper, 1957, pp. 57-69.

his theory, which has been regarded by a number of people as a clue to the economic riddle. Still Marxism has not been eliminated from our contemporary economics. Now is the time to make sure that the Marxist analysis is not a valid theory of society but simply furnishes a part of the mechanism for a theory of society. Such a theory does not now exist. To offset or replace Marxism, we need a theory which takes account of the multiple motivations of human beings, one in which economic forces, dynamically interacting over time, help determine other aspects of the society and are partially determined by themselves.

Professor Rostow once wrote:

"The author has by no means solved the problem of formulating an alternative to the Marxist system; but he would argue that the focusing of attention on this problem is an urgent item on the agenda of the social sciences. Further, its solution appears essential both for a full understanding of the process of economic growth in the past and for the formulation of adequate public policy designed to sustain or accelerate economic growth in the many portions of the world where this is the majority will of peoples and the enunciated aim of their governments."12

As far as the field of economics is concerned, the essence of the Marxian standpoint is as follows.13

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The fundamental proposition of Marxism is the so-called economic or materialistic interpretation of history. The general character of the various processes of life is fundamentally determined by the mode of production in material life. Marxism proceeds to the conclusion that the entire history of society is merely a record of class struggles. Nineteenth-century industrialism had greatly simplified previous class alignments by splitting society into two great hostile groups: the bourgeoisie, as sole owners of the means of production, and the proletariat, devoid of all productive forces except their own labour power and hence at the mercy of the small class of bourgeois employers. The dominant economic class, whenever faced by the refusal of an outmoded economic class to surrender its political dominance, has been compelled to erect a new political state of its own in order to consolidate its economic power. Marxism regards control of the political state by the dominant economic class as the central fact in all history.

The class struggle is originated and kept going by the existence of surplus value. The worker alone produces all wealth and is rightly entitled to the full value of his creation. Marxism reduces all labour to simple average labour, regards land as merely a passive agent and capital as the product of past labour. The exchange value
of everything is determined by the labour time socially necessary to produce these products. The workers do not receive the full value of their labour, but, with only their labour power to offer, receive from employers no more than enough for meager subsistence and the propagation of the race. Employers on the other hand, are said to be pocketing as profits the surplus value, the difference between what they pay their workers and what these workers produce. Marxism believes exploitation in capitalist society taking the form of surplus value, which grows apace as increasing efficiency of production shortens the labour time socially necessary to produce the workers' subsistence.

Industry concentrates into larger and larger business units as wealth and income come increasingly into the hands of an ever-diminishing number of people. Production increases, but the consuming power of the working population relatively decreases. Periodic depressions are for a time offset by various expansionist phases of capitalism, but, with the drying up of both foreign and domestic markets, society becomes increasingly rent by devastating crises and enters upon a period of industrial decline leading inexorably to the collapse of capitalism. As the class struggle intensifies, the rich grow fewer and richer, the poor more numerous and poorer. The increasing number and misery of the labouring class engenders a militant
class consciousness. The proletariat hampers and attacks the capitalistic system in every possible way. When conditions have become unbearable, and where constitutional means of reform have been of no avail, the workers unite in a mass uprising at some propitious moment, overthrowing the ruling class by the use of every method which capitalism has employed to preserve itself. Capitalism, containing within itself the seeds of its own destruction, supplies the motive power which brings about its inevitable extinction. With capitalism overthrown, the working class assumes complete control. The task of reconstruction is carried on for an indeterminate period under the leadership of the proletarian dictatorship. When, finally, the working class has come to include the entire population, this intermediate stage of socialism evolves into communism, the completely classless society, and civilization has reached its final stage of development.

Professor Rostow summarises the Marxist thought in seven propositions.¹⁴

"(1) A society's political, social and cultural characteristics are a function of the conduct of the economic process—until the stage of communism is reached, ---.
(2) History moves forward by a series of class struggles, ---.
(3) Feudal societies were destroyed when they permitted the growth of a middle class ---.

¹⁴ Walt Whitman Rostow, "Rostow on Growth; A Non-Communist Manifesto," Lectures delivered at the University of Cambridge, Economist, August 22, 1959, pp. 528-529.
(4) Capitalist industrial societies would create the conditions for their own destruction because they created a working force to which they allocated only a minimum wage; and because the enlarging of industrial capacity would lead to a competitive struggle for markets.

(5) An increasingly assertive proletariat would be goaded to seize the means of production.

(6) This seizure of power would occur in a setting of disruption caused by imperialist wars.

(7) After this seizure of power, production would be driven steadily forward, without crises, and real income would expand until true communism became possible.

There are certain similarities between Professor Rostow's dynamics (the traditional society, the transitional society, the society in take-off, the maturing society, and the mass consuming society), and the Marxist standpoint (feudalism, capitalism, socialism, and communism). By accepting the facts that economic change has social and political effects, and that there is the reality of group and class interests which help to create the causes of wars, both theories start from traditional or feudal societies and inquire into the process of building compound interest into the social structures. And both indicate the goal of true affluence in the end, although the mass consuming society and communism are extremely different.

As Professor Rostow said eight years ago, the problem of formulating an alternative to the Marxist system is an urgent item on the agenda of the social sciences. Judging from the previous study, Professor Rostow's dynamics certainly has a cogent characteristic as a non-communist
manifesto. His basic criticism of Marxism is related to the following two aspects. The Marxist hypothesis omits the role of very long-run forces which have manifestations in religion and the consciousness of nationality; and it gives an undemonstrated priority and fundamental causal position to economic motivations and economic processes in social and political life.  

Human motivation is the key point of attack on Marxism. Although the people is a complex unit, seeking power, leisure, adventure, continuity of experience and security; concerned with the family, the values of the culture; and capable of being moved by a sense of connection with other human beings, Marxism finds nothing but the notion of profit maximization as human motivation. The historical background and Marx's personal experience made Marx think that people's behaviour was not an act of balancing alternative and conflicting objectives. However, in the factual world seen in the light of economics, patterns of choice, not a rigid inevitability, are of significance. As a matter of fact, Marxism assumes that the decisions of a society are a function of who owns property; so capitalist societies would cling for ever to the free market mechanism and private advantage. Thus, Marxism can give no explanation why capitalist societies accept progressive income increase.

tax and the welfare state, and why the working class joins in democratic political activities.

"The outcome of social conflict is in fact likely to be governed by ultimate considerations of communal continuity. --- Karl Marx regarded the ultimate human solvent as cowardice and betrayal, not as the minimum condition for organized social life, --- "16

According to Marxism, economic advantage, i. e. profit maximization, is the cause of wars. But colonial wars were fought mainly because of national prestige and power, regional aggressions were aroused from the dilemma between asserting national power on the world stage and consolidating central governmental power over traditional forces in the regions, or concentrating on modernization, and massive wars were attempted to win decisive hegemony in the world arena. Capitalist societies enjoy making strides of economic growth without being dependent upon colonies. Colonialism is virtually dead.

World economic development has been tracing the route of the five stages: the traditional society, the transitional society, the society in take-off, the maturing society, and the mass consuming society, not only by the effect of profit motives. As soon as people understand that they need not die young or live in illiteracy, there appear some forces to make this process of development

16 Walt Whitman Rostow, "Rostow on Growth; A Non-Communist Manifesto," Lectures delivered at the University of Cambridge, Economist, August 22, 1959, p. 529.
inevitable. It seems that societies have behaved in the most Marxist way in the drive to maturity, nevertheless people do the things needed to industrialize a society not merely to make money, but to have power, adventure, challenge and prestige. Marxism cannot explain "the ardent striving of men long after they had made more money than they or their children could conceivably use."^17

An industrial reserve army does not seem to have arisen, and the idea of stagnation of capitalism is made unrealistic by rising real wages. Competition does not lead to monopoly—-if monopoly develops, it is more because of the economies of large scale research and development than because small firms could not survive the market environment. Owing to trade unions and various pressure groups arising from the democratic process, wages approximate to net marginal value product. The Keynesian revolution has been making the amplitude of cycles of unemployment smaller and smaller through sensitive economic policy. Since people prefer a productive activity to leisure, they have a lot of things to do productively. Therefore, diminishing returns are not likely to prevail.

Where the class struggle is softened, what is left is not a dominance of the profit motive and progress,

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but a problem of balance between external assertion, consolidation of central power, and economic growth. Eventually, Marxism assumes that our compound interest appears in the perverse form of mounting profits, capable of being distributed in high capitalist living, unusable capacity and war; but Professor Rostow's dynamics asserts that on the other hand, our compound interest would face the choices between the national pursuit of external power, the welfare state and the expansion of mass consumption.

Finally, we have to notice the fact that Marxism has formidable force as a technique of power, because it could help to establish a system of state organization based on political determinism. In a transitional society, a well-disciplined minority can seize power, which means the control of the army, police, and means of communication. A centralized dictatorship may supply essential pre-conditions for take-off, through setting up confusion and conflict between traditional elements and modernizers.

The Marxian standpoint is faulty, and Professor Rostow's dynamic view is valid, to interpret the world economic development. But the outcome is uncertain.
"The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed, the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influences, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. I am sure that the power of vested interests is vastly exaggerated compared with the gradual encroachment of ideas. — Soon or late, it is ideas, not vested interests, which are dangerous for good or evil."

---J. Maynard Keynes
V. Conclusion

---Prognosis

There is a growing conviction that world economic development holds the key not merely to save the world, but primarily to save our own souls. Very few problems are more engaging and more significant than dynamics of world economic development.

To study social reality, it is absolutely important to approach from the viewpoint of human ideals, because our thoughts are directed by a value connotation. An enormous number of theories have been set forth, but most of them lack cogency, due to the fact that they emphasize many things that are not true. To speak of development is to assume that the society is proceeding, or failing to proceed, in a certain direction. Certain standards or criteria of such development are not so simple that they are explained by an economic dynamic approach of a sociological institutional approach. Capital accumulation, economic diversification, balance of payments, technological development, population, labour, employment, land distribution, colonialism, dualism or pluralism, political affairs and ideology are very important problems per se; however, different opinions which are founded on those different bases must become a broad synthetic system by improving each other. Professor Walt Whitman Rostow
has been establishing a dynamic theory with broad understanding of existing theories and overall research of practical facts.

As an economist, Professor Rostow makes a reasoned catalogue of the world as it is, because he believes that we must not picture to ourselves an unreal world as it might, or ought to be, and make schemes for it. His dynamic theory of economic growth on a global basis is based upon factual history seen in the light of economics. Following an inevitable process of development, all economies in the world have been tracing five stages of growth.

Almost two centuries have passed since the United Kingdom first attempted a take-off. Meanwhile, France, Belgium, the United States, Germany, Sweden, Denmark, Japan, Canada, Australia and the Union of Soviet Socialist Republics have reached the stage of maturing society. Mexico, Argentina and Turkey seem to have finished the process of take-off, and China, India and Yugoslavia are taking-off now. Burma, Nigeria, the Belgian Congo, Southern Rhodesia, Colombia, Bolivia and Ecuador are trying to take-off, and Puerto Rico, Panama, Venezuela, Peru, Brazil, Chile, Iran and the Philippines keep up with the forerunners. It is obvious that even Indo-China, Thailand, Indonesia, Ceylon, Pakistan,
Afghanistan, Iraq, Egypt, Ethiopia, Kenya and Ireland will sooner or later get out of the pre-take-off stage. In the modern world there will very soon be no entirely traditional societies left.

The future never resembles the past. Human knowledge is too weak to tell what particular changes to expect. Nobody knows what the future holds. Still we must be guided by some hypothesis, because as moving beings, we are forced to act. Eventually, the assumption that the future will resemble the past is the chief determinant on how we act in practice.

When we know that the arena of social conflict will become truly global in six decades, and that the outcome of social conflict is in fact likely to be governed by ultimate considerations of communal continuity, three massive current problems should be considered: how to mollify the dangerous characteristics of the Union of Soviet Socialist Republics; how to cope with a number of the underdeveloped countries; and how to clear up the meaningless of Marxism. The great empire which stretches out from Europe to Asia has now reached its dangerous stage, facing inevitable choices. The fate of those living in the stage of high mass consumption as well as those suffering greatly from the inequality of the world economic structure, will be largely determined by the nature of the pre-take-off conditions and take-
off in the younger nations. The minimum condition for organized social life is the ultimate human solvent that the best decisions are the result of disagreement, not of a single motivation.

Observing the past economic history of the world, we might know that the ideas of economists are very influential whether they are right or wrong. Thus, we must make known the following facts. As far as the underdeveloped countries are concerned, the path of development is an uphill one. However, given the willingness to bear the costs of development, and given the prerequisites of sociological and political development, the prospects for development are hopeful. After the rate of development is accelerated, the obstacles to further development may be more easily reduced. Professor Rostow's theory shows that once momentum is gained, the process tends to be cumulative and each advance creates the conditions for further advance. As for the developed countries, the current institutionalization of many requirements for development makes continued growth possible. There can hardly be seen any sign that changes in the prevailing economic and social structure are undermining the present institutionalization of development requirements.

It is true, as J. Maynard Keynes once indicated,
that when we wish to put our point of view clearly, we
must sometimes pretend to a little more conviction than we feel.

Professor Rostow's theory is, at a minimum valuation, full of interest and application to the present world; and contains many foresights for the future. I consider it may be rated much higher, as superior to all other approaches, replacing and invalidating them. Neither Marxism, nor the other non-Marxist views, satisfy our contemporary value connotations; they are both too narrow.

I believe that the rich have as clear a duty to bear the burdens of the poor, as the poor have to bear their own, but the burdens of the poor are born too much by themselves.
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