

The State and the Market, Their Functions and Failures in the History of Economic Development Thought

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"We must consent to advance cautiously, step by step, feeling our way, adopting no foregone conclusions, trusting no single science, expecting no infallible guide. We must neither maximize the functions of Government at the beck of quasi-military officials, nor minimize them according to the theory of the very best philosophers. We must learn to judge each case upon its merits, interpreting with painful care all experience which can be brought to bear upon the matter."

William Stanley Jevons

I. Introduction

What is usually called development economics is a body of economic thought which emerged during the 1940s. This body of thought, which started in the works of writers such as Paul Rosenstein-Rodan, Nurske, Kuznets and many more, began not as a formal theoretical component of economic theory, but as a practical subject matter and advice to policy makers and governments in underdeveloped countries for the purpose of reducing poverty and backwardness. Among the earliest works in this branch of economics we can name Paul Rosenstein-Rodan's "Problems of Industrialization of Eastern and Southern Europe," (*Economic Journal*, 1943), Eugene Stanley's *World Economic Development* (1944), and Kurt Mandelbaum's *Industrialization of Backward Areas* (1947).

This new body of thought, instead of relying solely on the market mechanism and the Smithean notion of invisible hand, saw the need for state intervention. Like Abba Lerner (1972), these early pioneers did not believe that market institutions spring up automatically. After all, as economic historians (such as Douglass North) have argued, modern industrialized economies have been products of time-consuming processes of development where gradually societies created appropriate institutions needed for this process. Early modern development economists' theories, which emphasized the need for state intervention in lifting underdeveloped economies out of their backwardness, was rooted in three 20th century successes: the success of Keynesian activism during the great depression in western countries, the success of the Marshall Plan in causing the quick recovery of the war-damaged economies of western Europe, and in the industrial achievements of Soviet planning during the 1930s. These three success cases had generated an international intellectual consensus concerning the power of the visible, rather than the Smithean notion of the invisible hand. The body of development thought which emerged during the 1940s emphasized the prevalence of market failures in the economies of the less advanced nations. The logic of this emphasis, as the justification for state interventions, will be discussed below.

However, to various writers, development economics preceded the 1940s and the interventionist cases of the 1930s and the 1940s, being rooted in situations where market-failure-based government interventions could not have played any significant role. According to Nobel Laureate Arthur Lewis, development economics began "in Britain in the century and half running from 1650 to Adam Smith's *The Wealth of Nations* (1776)." (*In*

Handbook of Economic Development, 1991, p.28). To Arthur Lewis, development economics is what Smith called "the natural progress of opulence." (ibid). In Arthur Lewis's view, early development economics, which was interested in the long-run process of economic change, ended when "the marginalist analysis of neoclassical economics introduced a static frame of thinking and shifted resources to the narrower problems of resource allocation and the theory of exchange." (quoted by Meier, p.3). To him, John Stuart Mill's *Problems of Political Economy* (1848) was "the last great book covering this wide range of topic." (*Theory of Economic Growth*, 1955, p.5). To Gerald Meier too development economics emerged prior to the 1940s. To him, beginning with Adam Smith's *Wealth of Nations*, "classical economics sought to discuss the sources of economic progress and to analyze the long-run process of economic change." (ibid., p.3). Amartya Sen also seeks the roots of development economics in the same age; he views William Petty as one of the founders of development economics. To Sen, so much of early economics was concerned with problems of economic development. This applied not only to Petty's writings, but also to those of the other pioneers of modern economics, including Gregory King, Francois Quesnay, Antonine Lavoisier, Joseph Louis Lagrange, and even Adam Smith. "An Inquiry Into the Nature and Causes of the Wealth of Nations was, in fact, an inquiry into the basic issues of development economics." (Sen, *Handbook of Economic Development*, p.10).

According to H.W. Arndt (in *Economic Development & Cultural Change*, 1981), Marx also dealt with development economics (p.458). And, according to Joseph Schumpeter, for Marx, "development was the central theme. And he concentrated his analytical powers on the task of showing how economic process, changing itself by virtue of its own inherent logic, increasingly changes the social framework - the whole of society in fact." (*History of Economic Analysis*, p.573). Many also view Joseph Schumpeter of the *Theory of Economic Development* as a pioneer in economic development. In the works of the above-mentioned writers (i.e. early development economic writers), the role of government is not, of course, emphasized. That also includes both Marx and Schumpeter.

However, can and should we really lump all the above-mentioned writers as development economists? In particular, since these two groups of writers wrote about two different types of societies, and responded to different types of problems. Since the distinctions between economic growth and development economics are not always explained, I will argue that in the works of many writers, including Nobel Laureate Arthur Lewis and writers such as A. Sen, there is a great deal of confusion concerning the nature of development economics (as opposed to economic growth). For example, some writers view development economics as simply growth in per capita GDP. To other writers, development economics is much more comprehensive than economic growth. To some writers, this body of economic thought should be applicable to both developed and underdeveloped countries. However, it will be argued that development economics is a field applicable only to poorer countries, those with significantly more market failures (including the Rodan-Scitovsky types as well as those discussed by Stiglitz and other more recently). Based on the modern literature of development economics, the distinctions between growth and development will be sought.

Since the 1940s, various economists have argued that market failures are more prevalent in less advanced countries, suggesting that governments have to play a more significant role in the process of economic development. In fact, it was this acceptance of the prevalence of market failures in the LDCs that led many modern pioneers of development in the 1940s to emphasize "the power of the visible hand," rather than the Smithean notion of the invisible hand. Of course, opponents of this "visible" hand, instead, have pointed out "gov-

ernment failures." To these writers, since government failures (of both omission and commission) in these countries significantly outweigh market failures, reliance on the market is being emphasized. The appropriateness of this argument will also be discussed.

II. The University of Economic Science: Should We Seek a Different Economics for the Underdeveloped Countries?

It is true that classical economists from Adam Smith to John S. Mill were intensely interested in economic growth. But was that concern identical to the post-WWII concern in the literature of development economics? It is interesting that this question was, at least implicitly, also raised by Arthur Lewis. In a 1984 essay, he asked: "whether there is need for a separate economics - Development Economics - for countries with less than 1980 US \$2000 per head." (March 1984, p.1). In other words, do such countries differ in structure or behavior from the richer countries, in ways that require different concepts or tools to understand their functioning, especially since it seems that classical writers were really interested in the growth of their own (initial) capitalist countries? In fact, Adam Smith was not really interested in the modern concept of development. Rather, in the *Wealth of Nations*, he discusses economic growth, or, in his words, "the progress of England toward opulence and improvement." Adam Smith, David Ricardo, and J.S. Mill spoke of material progress in the west and not development in the way we describe today. Even when Adam Smith spoke of China and India, as H.W. Arndt reminds us (1973, p.13), he was aware that he had to rely largely on accounts "generally drawn up by weak and wondering travelers, frequently by stupid and lying missionaries." (WN). Ricardo also concentrated on economic progress in England, Western Europe and North America. And, according to John Hicks, it was John Stewart Mill "who killed the old Growth Economics and paved the way for the State Epoch which was to follow." (1966, p.260)

Although modern economics was bred in the west and in every sense bears the stamp of western problems and institutions, some writers have claimed that it is independent of space and time and is universal. For these writers, there are no structural differences between the economies of the developed and the underdeveloped countries. One of the champions of this universality was L. Robbins who argued that: "It has sometimes been asserted that the generalizations of economics are essentially historic-relative in character, that their validity is limited to certain historical conditions, and that outside these they have no relevance,... this view is a dangerous misapprehension." (Essays, 1936, pp.30-1)

Long before Robbins, Senior argued that political economy should not be limited by consideration of time and space. To him, economic doctrines belong to no single nation or region and possess universal validity. Wages, profits and economic phenomena were held to be governed by immutable laws comparable to the law of gravity. (See Hosseini, 1993, p.104). The same view was held by Ricardo. In DeQuincey's eulogy of Ricardo (which is quoted by John Neville Keynes), we read: "Previous writers had been crushed and overlaid by the enormous weights of facts, details, and exceptions; Mr Ricardo had declared, a priori from the understanding itself, laws which first shot arrowlight into the dark chaos of materials, and has thus constructed what hitherto was but a collection of tentative discussions into a science of regular proportions, now first standing upon an eternal basis." (p.297)

However, since the 19th century, many economists have questioned the applicability of standard economics to the underdeveloped world. The historical school questioned the universality of economic generalizations of western economics and maintained that they

are based on the particular circumstances of western industrialized nations. Also in the 19th century, Alexander Hamilton, Carey and List questioned the applicability of English classical free-trade theory to two of the underdeveloped countries of the time, namely, the United States and Germany. (Hla Myint, p.477). Alfred Marshall, who, unlike Robins, viewed economics as "a study of mankind in the ordinary business of life," emphasized the peculiarities of non-western societies and had his doubts about the application of western economic theories to the underdeveloped world. In 1885, in explaining the position of Ricardo and his followers, Marshall wrote: "They regarded man as, so to speak, a constant quantity and gave themselves little trouble to study his variations. The people whom they knew were city men; and they took it for granted that other Englishmen were very much like those in the city. They were unaware that inhabitants of other nations had peculiarities of their own; but they regarded such differences, when they thought of them at all, as superficial and sure to be removed as soon as other nations had got to know that better way which Englishmen were ready to teach them. The same bent of mind, that led our lawyers to impose English civil law on Hindoos, led our economists to work out their theories on the tacit supposition that the world was made up of city men." (in Pigou, ed., 1966, pp.154-5).

After the publication of J.M. Keynes' *General Theory* (which makes only one reference to an underdeveloped country - on p.337), many reacted to the assumption that Keynesian economics can also be applied to the problems of underdeveloped economies. For example, in a series of articles that apparently appeared in *Indian Economic Review* (Volumes 1, 2, and 3), V.K.R. Rao "called attention to the special features of underdeveloped economies and inquired to what extent the Keynesian propositions apply to these economies." (A.K. Dasgupta, 1954, p.101). According to Dasgupta, that topic was a subject of discussion in the 1953 session of the Indian Economic association, and a good many papers were devoted in the Conference to a consideration of this problem." (Ibid.) He continues that "in general, the authors, despite differences in emphasis on specific points, seem to have reached the conclusion that Keynesian economics, insofar as it is formulated in the *General Theory of Employment, Interest and Money*, has little validity in the context of underdeveloped economies, that Keynesian involuntary unemployment is not the kind of unemployment from which these economies suffer, and that the problem in these economies is one of long-term economic development rather than the attainment of full-employment in the Keynesian sense. Broadly speaking, I find myself in sympathy with this general attitude." (Ibid.)

Even before the 1940s, inspired by the October revolution, some writers in the underdeveloped countries expressed views very similar to those which emerged during the 1940s and 1950s literature of modern development economics. These views can be found in China, Turkey, Egypt, and Iran (still called Persia). For example, in 1922, Chinese nationalist President Sun-Yat-Sen published a book in which he proposed a massive program of economic development for China where foreign capital could be sought. In the book Sun-Yat-Sen stated that "China must not only regulate private capital, but she must also develop state capital and promote industry...build means of production, railroads and waterways, on a large scale. Open new mines...Hasten to foster manufacturing." (p.8, also quoted in H.W. Arndt, *Economic Development and Cultural Change*, p.464).

Noble Laureate Gunnar Myrdal was also opposed to the application of standard western economics to the underdeveloped countries. To Myrdal, the underdeveloped countries

should not accept western economics uncritically since "much of this theory is a rationalization of the dominant interests in the industrialized countries (1957, p.101).

In 1965, numerous economists from some seventeen Latin American countries published a single document entitled *The Need for New Approaches to the Teaching and Research of Economic Science in Latin America*. In this document, the assumption is that the underdeveloped countries of the world need their own economic theories. In the document we read: "It is we, the economists of underdeveloped countries, who have the duty to formulate a body of knowledge based on observation and experience by arranging these facts in a logical order which will permit us to devise conclusions of general validity. The analysis of the problems of Latin American development requires its own theory which, without reflecting on the constructive contributions which it can gather from other countries, should arise basically from the systemic observation and analysis of Latin American problems. *The theory of development formulated in highly industrialized countries does not adequately explain such problems.*" (see Hosseini, 1993, p.107, emphasis is ours).

In 1983, another group of Latin American economists began a journal: *Economia: Theoria y practica*. The founding members of this journal were also suspicious of conventional economic theory. In the introduction of this journal we read: "we must critically analyze economic theory that is elaborated in the metropolitan (developed) countries because it is determined by mechanism of thought and by social needs that are different from our own. We must learn to separate what we have in common from what in which we differ," (Ibid).

The same suspicion is prevalent among the proponents of Islamic economics. According to Akram Khan, a Pakistani proponent of Islamic economics, "Most of modern economic analysis is the study of the behavioral patterns of individuals, firms and public bodies of western capitalist societies. Without questioning the validity of this analysis, it can be safely said that such an analysis need not be universal and valid for all times. It is based on the way western man behaved or is believed to have behaved. But since the cultural, political and social set up of Muslim society is basically different from western societies, conventional economic analysis may not be applicable in the former situation." (1984, p.84)

III. Development Economics Versus Economic Growth: Can They Be Identical?

What is economic development? How is it different from economic growth? Different and often contradictory responses are provided to this question. According to Gerald Meier, during the pioneering period (the 1940s and 1950s) most economists came to interpret economic development as denoting growth in per capita real income in underdeveloped countries. To others, as Gerald Meier argues, it implies growth plus change, especially change in values and institutions. (Pioneers, p.6). These interpretations are indicative of the tremendous disagreements among economists concerning the meaning of economic development and economic growth.

During the early years (immediate postwar years), "economic development became virtually synonymous with growth in per capita income in the less developed countries." (See H.W. Arndt, *Semantic History*, p.465). This explains why, in his 1944 work, Arthur Lewis viewed the goal of economic development to be the narrowing of the gap in per capita income between rich and poor countries. (In an *Economic Plan for Jamaica*, 1944, p.156). Or, that, in 1947, a United Nations' document saw the major task of the underdeveloped countries to be the increase of the national welfare of the entire population. (See UN's

Economic Development in Selected countries p.xu). This also explains why Arthur Lewis' major work in development economics was entitled *The Theory of Economic Growth*, (1955), and that W.W. Rostow's famous work on the subject was called *Stages of Economic Growth* (1960).

However, since the 1940s there have emerged various definitions of economic development. Some writers have discussed economic development without actually providing a definition of this concept. In other words, some writers have discussed development theory, goals of development, various approaches to the study of development and the characteristics of underdeveloped countries without actually providing a definition. Examples are: Jacob Viner's essay "The Economics of Development" (in D.E. Novak and R. Lechachman, 1964) and Jeffrey Nugent and Pan Yotopoulos' book on the subject (1976).

For many writers, economic growth and economic development are identical. To these writers, both economic growth and development should imply long term and sustainable increases in per capita income and output. Such views of economic growth and development are obvious in G.M. Meier and R.E. Baldwin's *Economic Development: Theory, History, Policy* (1957, p.2), Phyllis Deane's "The Long Term Trends in World Economic Growth" (1961, p.14), Harvey Leibenstein's *Economic Backwardness and Economic Growth* (1957, p.7), G.F. Loeb's *Industrialization and Balanced Growth* (1957, p.7), and Walter Kraus' *Economic Development* (1961, p.29). For example, in Harvey Leibenstein's book we read: "we shall utilize per capita output or per capita income as our index of development." (p.9). The same view is also expressed in Lionel Robbins' *The Theory of Economic Development in the History of Economic Thought*.

For some writers economic development and economic growth are not identical. For example, in Angus Maddison's *Economic Progress and Policy in Developing Countries* (1970, pp.15-16) and in A.O. Hirshman's *The Strategy of Economic Development* (1959, p.29), economic growth is something that happens to a rich country, while economic development is something that takes place in a poor country.

In Joseph Schumpeter's *The Theory of Economic Development* (1934, p.63) and in Y.S. Brenner's *Theories of Economic Development and Growth* (1966, p.223) the origin of the process is being emphasized. In other words, these writers seek whether or not the primary stimulus is endogenous or exogenous. According to Brenner, economic growth is endogenously produced while economic development is caused by exogenous factors. But, for Joseph Schumpeter, economic growth is exogenously determined while economic development takes place endogenously.

Other writers have defined these two concepts in terms of the ability of various economies to expand their productive capabilities. However, for some of these writers, such as Warren Nutter in his 1957 J.P.E. Paper "On Measuring Economic Growth," expansion implies economic growth. For other writers, such as Eugene Stanley in his 1944 *World Economic Development*, it implies development. For some in this group, such as Fritz Machlup in his 1963 *Essays on Economic Semantics* and Celso Furtado in his 1964 *Development and Underdevelopment*, development is defined in more specific terms as creating the potential for more growth, while for G.M. Meier in his 1976 *Leading Issues in Economic Development* development results from growth.

Another group of economists distinguish economic growth from economic development in terms of the degree of structural change involved. For them, only development involves such structural changes (or, as some call it transformation). To these writers, structural changes include economic, political and social changes. For some of these writers, development is structural changes plus output increases. Thus, it also includes economic growth. In this group we can include Charles Kindleberger in his *Economic Development* (1965, p.3) and Everett Hagen in his *The Economic of Development* (1975, p.3).

So where is one left by all this confusion of definitions offered? Are growth and development really so different that no reconciliation can be achieved? It seems accurate to suggest that growth and development are, perhaps, complementary. As suggested by Robert Flammig, we "use the terms growth and development in reference to economics in the same ways they use them in reference to biological or social phenomena. We say, for example, that a child grows up; we do not say that he develops up. A professional football coach expects a rookie to develop more than he grows, on the one hand. We expect something to expand in size, we expect it to grow; when we expect its characteristics to change, we expect it to develop." (1979, p.50). He further argues that: "Of course, these are matters of relative emphasis: as a child grows, he or she also develops a deeper voice and an expanded bustline, hopefully respectively. Growth and development usually occur simultaneously. But that does not mean that they are the same thing. A child may grow a good deal bit without developing very much, or develop a good deal without growing very much." (Ibid.)

This seems to be an accurate account of the concepts of development and growth in economics. When we economists speak of economic growth we usually imply a quantitative and measurable increase that occurs in the economy (i.e. GDP). However, when we use the term development we usually imply a qualitative change. As Robert Flammig also suggests, economic growth is a process of simple increase, implying more of the same, while economic development is a process of structural change, implying something different if not something more. This is to suggest that growth and development, whatever they are, are not the same things. However, they are complementary processes, each having the potential of contributing to the success of the other.

IV. Modern Development Economics and Market Failures in LDCs

The new body of development thought began during the 1940s. It actually goes back to 1942 when Rosenstein-Rodan proposed in London the formation of a group to study the problems of economically underdeveloped countries (instead of the more usual work on war related economic problems). This group was actually organized in 1942 at the Royal Institute for International Affairs (Chatham House) and worked until 1945. Being aware of various structural differences between the developed and underdeveloped economies, it was this study group that for the first time used the term economically underdeveloped countries. Paul Rosenstein-Rodan's 1943 economic journal article was a partial report of the Economic Group of the Committee on Reconstruction at the Royal Institute of International Affairs.

Beginning with the 1940s, economists such as Rodan, Eugene Stanley (1944), Kurk Mandelbaum (1947), Nurske (1953) and Kuznets (1955) tried to identify the causes of economic underdevelopment, and thus propose strategies for overcoming economic backwardness. The attempts of these economists gave rise to various development theories. For

example, Nurske's 1953 work, in discussing the problem of capital accumulation in poor countries, introduced the now famous notion of "vicious circle of poverty," and Kuznet's 1955 work discussed the relationship between the process of economic development and the shifting of the labor force from low-productivity agriculture to high-productivity manufacturing. However, post-1942 development economists, by-and-large, emphasized the role of the state rather than the Smithean notion of invisible hand in the process of economic development. [I am reminded by Professor Christian Schmidt of the Universite de Paris that based on *WN's* book V there is no contradiction.] This explains why many years later, Noble Laureate Arthur Lewis (as one of the pioneers) acknowledged the role of the state in the process of development. To him, "Although government expenditure is a smaller share of the national income in proper countries, nevertheless the government is more closely intertwined in poorer countries with the modern sector, where no large private event occurs without the government becoming involved in some way." (AER, March 1984, p.4).

His justification for this close tie is the following: "One reason why government is closer to the developing economy is that the market works less efficiently there than in the developed economy. So government is constantly asked to rectify market error, or market inequity. To say this is not to imply that government action in the market always gives a better answer than the uncontrolled market, whether in allocation or in distribution. For just as the market gives better services in rich than in poor countries, so also the government tends to be better administrated, has more resources, and is slightly less dominated by "politics" and personal advantage in decision making. Pigou taught economists that the market was imperfect, but that points of imperfection could usually be eliminated by handing the problem over to the government for tax or subsidy. Such an assumption is not valid for all LDCs." (Ibid.)

This type of analysis, which recognizes the prevalence of market failures in LDCs, started with Rodan's aforementioned 1943 article. Rodan began the argument that instead of a traditional static analysis of equilibrium theory, the understanding of economic development problems requires an analysis of the disequilibrium growth process (see his 1943 article and his 1984 *Natura Facit Saltum* essay). As he described in his 1984 essay, his 1943 paper "attempted to study the dynamic path toward equilibrium, not merely the conditions which must be satisfied at the point of equilibrium" (p.208). He was "therefore concerned not only with the existence of equilibrium, but the possibilities of nonexistence of equilibrium." (Ibid.)

In explaining the problems of the underdeveloped countries, Rosenstein-Rodan's 1943 article introduced four "innovations" which originally aroused a great deal of opposition. The first of these innovations had to do with the argument that disguised unemployment was a reality in the underdeveloped countries. This concept, which had its roots in the 1920s, and which became one of the cornerstones of the new development theory during the 1940s and the 1950s, was criticized by Jacob Viner, Gottfried Haberler and T.W. Schultz. For example, in a 1950 essay Schultz argued that "I know of no evidence for any poor country anywhere that would even suggest that a transfer of some small fraction, say five percent, of the existing labor force out of agriculture, with other things equal, could be made without reducing its production." Disguised unemployment was important for dualistic models of development and the types of development theories which emphasized labor-intensive methods of industrialization.

A second "innovation" had to do with the concept of pecuniary external economies which yield economies of scale (increasing returns to scale which had been treated in Marshall footnotes).

The third innovation was about another case of market failure (where things were clarified after the publication of Tibor Scitovsky's 1954 paper, "Two Concepts of External Economies" - JPE). According to Rosenstein-Rodan, in the underdeveloped countries, before building consumer-building factories, a major indivisible block of social overhead capital or infrastructure must be built and sponsored because private market initiatives will not create it in time. (See both 1943 and 1984 essays). To him, low wages in the underdeveloped countries (such as India) should have been able to create there, for example, a textile industry in post-Napoleonic Era and not in Lancashire, England. However, to him, further analysis reveals that "in order to build a factory one would have to build a bridge or finish a road or a railway line or later an electric power station. Each of these elements in the so-called social overhead capital requires a minimum high quantum of investment which could serve, say fifty factories but would cost far too much for one. One cannot build a bridge small enough to allow only a hundred crossings a day. The efficient minimum would be profitable for fifty factories but not for one." (Rodan, p.208). He also stated that: "The market mechanism alone will not lead to the creation of social overhead capital, which normally accounts for 30-35 percent of total investment. This must be sponsored, planned, or programmed (usually by public investment)." (Ibid., p.209). As a result of clarifications in the Scitovsky paper, Rodan was able to write that: "To take advantage of external economies (due to indivisibilities) required an "optimum" size of enterprises to be brought about by a simultaneous planning of several complementary industries. In the process of development, pecuniary external economies play the same role as technological ones." (Ibid., p.209). According to Scitovsky, "Indeed, I shall argue that there are two entirely different definitions of external economies, one much wider than the other; and that external economies as defined in the theory of industrialization (of underdeveloped economies) include, but go far beyond, the external economies of equilibrium theory." (1954, p.143).

Rosenstein-Rodan's fourth "innovation" was his emphasis on technological external economies - i.e. those resulting not from indivisibilities but more or less from "inappropriability." He explained this notion as follows: "Under a system of slavery it paid the owner in training a slave because the increase in skills would benefit the investor. When slavery was abolished, a worker trained could contract with an outside employer who did not have to bear the cost of his training. Whoever invested in the training of the worker would run the risk of not being able to appropriate the benefit of increased productivity." (Ibid., p.209).

To Rodan, this example suggests technological external economies are logically interesting but practically irrelevant. The process of industrialization of underdeveloped economies is based on the advantages of training, learning on the job, and the formation of human capital. In other words, to Rodan, (unlike for his critics Jacob Mincer and T.W. Schultz), technological external economies are not a second order of smalls. To him, the market mechanism does not realize the optimum either in one nation or between nations because it relies on such unrealistic assumptions as linear homogenous production functions, no increasing returns or economies of scale or of agglomeration and so forth." (Ibid.)

Among the strategies resulting from the market failure-based theories discussed above was the theory of the big push. This theory was different from conventional economic theory (i.e. static equilibrium theory) in three different ways. First, in contrast to con-

ventional theory at the time, it assumed certain indivisibilities and nonappropriabilities in the production function which give rise to increasing returns and to technological externalities. Second, since at a point of static equilibrium investment is zero and that economic growth requires investment, this theory, instead of relying on static equilibrium assumes the path to equilibrium. Third, in addition to imperfections characterizing investment in any society, the theory of the big push also assumes that the markets in underdeveloped countries have even more imperfections. To Rodan, "The price mechanism in such imperfect markets cannot, therefore, be relied upon to provide the signals that guide a perfectly competitive economy toward an equilibrium position" (Ibid., p.211).

It was the pervasiveness of "rural underdevelopment" (excess agrarian population that made "new" development economists emphasize the need for a big push. Assuming the unfeasibility of mass migration and resettlement, Rosenstein-Rodan argued that: "The movement of machinery and capital towards labor, instead of moving labor towards capital, is the process of industrialization which, together, with agrarian improvement, is the most important aspect of the development of the depressed areas." (International Affairs, April 1944, p.161).

According to this line of reasoning, such industrialization should be promoted by the government not because of terms of trade, but because external economies are greater in industry than in agriculture. The main task of the government in seeking development is to achieve investment to mobilize the unemployed and underemployed in society. This could become a significant source of technological external economies if it could lead to the training of labor. It is through the training of labor that peasants could be transformed into industrial workers. In the words of Rodan, "The automatism of *laissez faire* never worked in the field. It broke down because it is not profitable for private entrepreneurs to invest in training labor. There are no mortgages on workers - an entrepreneur who invests in training workers may lose capital if these workers contract with another firm. Although not a good investment for a private firm, it is the best investment for the state. It is also a good investment for the bulk of industries to be created when taken as a whole..." (1984, p.214).

As stated above, in post 1942 literature of development economics, the requirements of complementarity of investment projects was recognized. It was realized that the dispersal of single investment decisions based on maximization of profits as the only criterion will not lead to the achievement of optimal combination. In single investment projects, the investor maximizes the private and not the social net product. This will also not lead to the sufficient realization of external economies. For these and other reasons, modern development economists emphasized the programming of investment decisions. This was necessary to correct in the underdeveloped economies the imperfections such as indivisibilities, externalities, and information failures. Programming, as Rodan suggested, is "just another word for rational, deliberate, consistent, and coordinated economic policy." (Programming in Theory and in Indian Practice, 1955, p.4). In fact many countries, including Italy, India, and Indonesia, began development programs in the 1950s. In the words of Mrinal Datta - Chaudhuri "In the 1950s, India adopted a development strategy which gave investment planning a dominant role. In certain areas the investment targets were implemented by direct public investments; in others, entrepreneurs in the private sector were supposed to be induced to make the required investments." (J.E.P., 1990, p.29).

The post-1942 literature of development economics has, in essence, emphasized the role of the state in the process of economic development. The state has to have a role to help

in the following. 1) Successful industrialization in LDCs requires an organized institutional framework. 2) A minimum of social overhead capital is necessary for this process of development; the provision of this minimum is beyond the ability of the private sector. 3) Industrialization in these areas requires training of peasants and their transformation into industrial workers. 4) Large scale planned industrializations are needed because of the complementarity of different industries. This reduces the risks of selling of the products of various industries and creates additional markets. 5) In the LDCs, divergence between the private and social marginal net product is not negligible. 6) The existing institutions of international and national investment do not take advantage of external economies, and 7) Government guarantees are necessary to induce necessary movements of capital internationally.

V. Government Failure and the Modern Literature of Development Economics

Emphasizing the prevalence of market-failures in less advanced economies, the post-1942 literature of development economics supported an active role for the government concerning the requirements stated above. As such, it emphasized the power of the visible rather than the Smithean notion of the invisible hand. However, by no means has this view been unanimous since WWII; various development economists still have emphasized the market mechanism and the private initiative. An example has been B.T. Bauer. Speaking of Bauer's view of development, Srinivasan writes: "Bauer's policy recommendations are predictable: a severely limited role for government, almost exclusive reliance on the market, including reliance on world capital markets rather than foreign aid for external capital need, and so on." (T.N. Srinivasan's Comment, in *Pioneers*, p.53).

As also indicated by Srinivasan, Bauer's discussions are not usually on sound theoretical grounds. In the words of Srinivasan, "While I agree with Lord Bauer that a much greater reliance on market is called for in many developing countries, I find in his writings more polemics and debating points than depth." (Ibid., p.54).

While various scholars of the underdeveloped countries view economic and social developments as modernization and the application of modern technology and the scientific ways of doing things, for Bauer development implied total adaptation of the western way of life and a great deal more than just accepting the value of the market mechanism. In his *Equality, the Third World and Economic Delusion* we read: "The concept of material progress, of steadily increasing control of man over his environment, is western, as are modes of conduct which derive from it...But the ideal of modernization without westernization is self-contradictory." (1981, p.205).

As A.H. Adler (in Bhagwati and Eckaus, eds., 1973) also argues, the World Bank has always advocated the virtues of the market mechanism (p.34). To him, this praise was even explicitly stated as early as 1951 in a report on (pre-Castro) Cuba entitled "Findings and Recommendations of an Economic and Technical Mission organized by the IBRD in Collaboration with the Government Cuba in 1950." From the report, Adler cites, "For, none of man's efforts to repeat the law of supply and demand have been successful." (pp.34-35). According to Adler, "the single most important component of the bank's development philosophy which emerged at the outset, was its firm and pronounced bias in favor of the advantages, not to say virtues, of a market economy and a system of private ownership and enterprise. By pronouncements at various levels of generalization and by specific action it asserted that development is faster, sounder and altogether better if the market and price

mechanism is allowed to allocate resources available for investment.” (Ibid., p.34). Adler points out that the World Bank also did not substantiate this preference with a proof. To him, “This dogmatic preference - dogmatic in the sense that it was thought there was no need for offering any proof for it, except perhaps by reference to the growth experience of the economies of Western Europe and of the advanced economies elsewhere - affected the Bank’s attitudes and actions in a variety of ways.” (Ibid., p.35).

Adler also indicates that: “the Bank’s essentially laissez-faire notion of development process was, however, perfectly compatible with its view of proper function of government in the development process: it was to create the institutional framework for the effective functioning of the privately-owned productive units which make up the economy. This was to be accomplished chiefly by an adequate provision of infrastructure investment, generally referred to in the early 1950s as social overhead capital.” (Ibid., p.36).

Gerald Meier also discusses the presence of those development economists who rejected the notion emphasized by market-failure oriented development economists. In his own words, “at the same time, however, as many of the early development economists rejected the teachings of neoclassical economics, there were those who warned that the analysis of development problems should not be price-less, that the functions of prices should not be ignored, that the economic responses to individual’s incentives should not be overlooked, and that the government should not intervene in the market price systems. Such a view dominated the work by P.T. Bauer and B.S. Yamey, *The Economics of Underdevelopment Countries*,” (Meier, in *Pioneers*, p.21).

Since the 1970s, various neoclassical economists have rejected the market failure-based development theories by focusing on the failures of governments in implementing development policies. These writers, who have been influenced by James Buchanan and the public choice school, have questioned the central role that government can play in the process of economic development. As one such writer, Anne Krueger, has argued, “the fact is that by the 1970s and the early 1980s, governments in most developing countries were mired down in economic policies that were manifestly unworkable. Whether market failures had been present or not, most knowledgeable observers concluded that there had been colossal government failures. In many countries, there could be little question but that government failure significantly outweighed market failures.” (Summer 1990, pp.9-19). (For “knowledgeable observers” she provides a 1983 World Bank report and Srinivasan’s 1985 essay).

Anne Krueger discusses two types of government failures - failures of omission and failures of commission. Citing two World Bank sources (1983 and 1986) a 1983 essay by Peter Short, she writes: “Failures of commission included exceptionally high-cost public sector enterprises, engaged in a variety of manufacturing and economic activities not traditionally associated with the public sector. Notable among these were: state marketing boards, which often served as a monopoly distribution network and frequently also provided inputs (erratically, and often heavily subsidized if not free) to farmers, state ownership of retail shops for the distribution of foods and other items deemed essential; state operation of mines and manufacturing activities; state enterprises accorded monopoly rights for importing of variety of commodities; nationalized banking and insurance operations; even luxury hotels are often found in public sector...” (1990, p.10).

Of failures of omission she writes, "Complementary to these phenomena were failures of omission: deterioration of transport and communications failures, which raised costs for many private (and public) sector activities; maintenance of fixed nominal exchange rates in the face of rapid domestic inflation, buttressed by exchange control and import licensing; insistence upon nominal rates of interest well below the rate of inflation with credit rationing so that governments could supervise credit allocation among competing claimants; and failure to maintain existing infrastructure failures." (Ibid.)

As by-products of these "government failures," there is also mention of large-scale and visible corruption. And, writers such as Gale Johnson have argued that various policies that had been initiated with the stated objective of helping the poor had in fact benefited the affluent the most. An example given is input subsidies which benefited the large-scale farmers the most (1987). This argument has also been made by Bhalla and Glewwe about Sri Lanka (1986) by Siamwalla and Suthad about Thailand (1989), and by economists from the World Bank. To these economists, these phenomena occurred while governments in underdeveloped countries had pervasive control and involvement in their economies.

Proponents of government failure provide a definition of this type of failure similar to the one presented for market failure. While market failure is defined in terms of the absence of the conditions for the satisfaction of Pareto-optimality, "government failure would then be the sum of actions and failures to act which resulted in a less-than optimal situation." (Krueger, 1990, p.11). Proponents of government-failure thesis are very critical of the modern literature of development economics because, to them, this body of thought implicitly: "assumed that the government would behave as a benevolent social guardian, in the Fabian socialist tradition. Economists would serve in government, calculating shadow prices and formulating planning models. Selfless bureaucrats would then carry out the plans. Coordination and administration of public sector activity was implicitly assumed to be costless. Moreover, as long as technocrats were in any event going to decide upon an investment and production plan, it was a logical next step to believe that the activities so determined should be carried out in the public sector." (Ibid.) The most explicit support in this type of argument Ann Krueger finds is a statement by Noble Laureate Tinbergen who, in his 1984 Pioneer lecture, stated that: "the type of ownership of the means of production is much less important for an enterprise's efficiency than the quality of its management. So efficiency considerations need not be a stumbling block if public enterprise is chosen as a means for furthering a country's development. Rather, the nonavailability of sufficiently large private capital is the decisive point." (Pioneers, p.326).

These critics, using the findings of public choice literature, point out several "insights" in terms of government policies in less advanced countries. First, when economic policies create something that is to be allocated at less than its value by any sort of government process, resources will be used in an effort to capture the rights to the items of value. In other words, people will spend resources to capture property rights from the government. Thus, rent-seeking behavior will occur (legal or illegal). (Ibid. pp.17-18). This is essentially an argument provided for government policies in the literature of Public Choice (and for more advanced societies). The only reference Krueger provides to show that such activity also occurs in under-developed countries is an essay by Graits, de Melo and Urata (1986) in which cost differentials are explained.

A second "insight" they provide is also one of the findings of Public Choice. According to this proposition, as a result of government policy beneficiaries and/or victims organ-

ize groups in support or opposition to these government policies and then lobby for increasing the value of the gains or reducing the value of losses from these policies. (Ibid., p.18, and another essay in M. Scott, etc.). For explaining this type of behavior (supposedly of the underdeveloped countries) Ann Krueger relied on Mancur Olson's 1965 *Logic of Collective Action* as well as a 1983 QJE essay by Nobel Laureate Gary Becker entitled "A Theory of Competition Among Pressure Groups for Political Influence."

A third "insight" in terms of the government behavior of less developed economies is the Public Choice assumption that there are different interest groups (for example spending ministers versus finance ministers within the government.) This is based on the public choice argument that many of those in the governments are also self-interested.

VI - Concluding Remarks

In spite of the above-mentioned public choice-based arguments, as Mrinal Datta-Chaudhuri has reminded us, "market failures present serious obstacles to the growth process of a backward economy." (1990, p.33).

In these economies, producers and suppliers of products do not always correctly perceive the opportunities open to them. "There is scope for imaginative interventions to alter their perceptions and thereby improve the performance of an economy." (Ibid.) There are many examples of successful government intervention. One of the best examples is the activities of the Japanese Ministry of International Trade and Industries (MITI) after WWII. It is an undeniable fact that the Japanese post-WWII industrial success would not have been possible without the initial effort of MITI. In fact, Miyoehei Shinohata, former head of the Economic Section of the Japanese Planning Agency and a long-time member of the Japanese Industrial Structure Council, attributes the Japan's success to MITI-adopted industrial policy and its violation of conventional trade-based policies. To him "In modern economics it has been considered that in an economy of abundant labor and scarce capital, the development of labor-intensive production methods would naturally bring about a rational allocation of resources. On the other hand, in an economy with abundant capital and shortage of labor, it has been assumed that any measure taken contrary to this theorem would be going against economic principles, thus distorting resource allocation. If this reasoning is correct, the industrial policies adopted by MITI in the mid-1950s were wrong. Ironically, however, Japan's industrial policies achieved unprecedented success by going against modern economic theory." (Quoted by Phillip King, 1990, p.82).

During the 1950s, MITI in Japan assisted Japanese industries to find the best areas of future action.

Another positive example of intervention is the case of South Korea. Since, as Larry Westphal has argued, "the government's selective industrial policies have contributed importantly to Korea's rapid achievements of international competitiveness in a number of industries." (1990, p.410).

Development economists of the 1940s and the 1950s, although correct about the serious problems of market failures in underdeveloped economies, did only focus their attention on a limited group of market failures. In other words, they only emphasized the market failures that are associated with investment decisions. The above mentioned emphasis on market failures associated with investment decisions in the field of development policy led

to a strong emphasis on investment planning with the optimistic belief that once the physical capital was installed, the problems of production would be resolved.

However, new research in development economics has discovered “new” market failures, in particular those associated with the operation of installed capabilities. According to this new literature, there is still a potential role for the government - to bring about Pareto improvements. (Stiglitz, 1986, p.257).

For example, Joseph Stiglitz, in particular in his 1989 NBER working paper, discusses two types of “new” market failures associated with underdeveloped economies: those which arise from imperfect information (as in capital markets) or those which are related to the learning that must occur if the developed economies are to be transformed to developed ones. As Stiglitz indicates, “these market failures are markedly different from those that were the center of attention in earlier literature, which led to arguments for government planning. Government interventions need to recognize the source of market failures; informational problems affect the government no less than the private sector. In some cases, interventions should be directed at making markets work more effectively; in other cases, the government takes a role in establishing non-market institutions to ameliorate the effects of market failures. (the accompanying abstract of NBER’s 1989 paper).

Stiglitz, and Howard Pack (1984 and 1987) suggest that underdeveloped countries differ from the developed countries in at least some respects (other than what was suggested in the post-1942 literature). Stiglitz and Greenwald acknowledge the existence of various market failures in more developed economies (implying that because of the presence of costly transactions, incomplete markets, and incomplete information, the government could made some individuals better off without making others worse off). (See Greenwald and Stiglitz, 1986). However, to Stiglitz, “Market failures is more prevalent in LDCs, and the non-market institutions which ameliorates its consequences are, at least in many instances, less successful in doing so.” (NBER, 1989, pp.2-3).

Stiglitz has argued that a major difference between the more and less developed countries arises from limits on the ability to transfer technology across countries. (Ibid., p.3). This point is also made by R. Lucas. (Journal of Monetary Economics, 1988 #22). In agreement with Kenneth Arrow (RES’s, June 1962) “that there is learning by doing,” Stiglitz also argues that, “the less developed countries find it impossible to acquire the learning of the more developed countries and find it optimal - given their initial disadvantage - to specialize in technologies or products with lower learning potentials...” (Ibid.).

References

1. Adler, A.H. 1973. "The World Bank's Concept of Development," in Bhagwati and Eckaus (eds.), *Development and Planning*, MIT Press, Cambridge, MA.
2. Arndt, H.W. 1973. "Development Economics Before 1945," in Bhagwati and Eckaus, *Development and Planning*, MIT Press, Cambridge, MA.
3. Arndt, H.W. 1981. "Economic Development: A Semantic History," *Economic Development and Cultural Change*, pp.457-466.
4. Arrow, Kenneth. 1962. "The Economic Implications of Learning by Doing," *Review of Economic Studies*, June 29, pp.155-173.
5. Bauer, P. 1981. *Equality, the Third World and Economic Delusion*, Weidenfeld and Nicolson, 1981.
6. Bhalla, S. and P. Glewwe. 1986. "Growth and Equity in Developing Countries: A Reinterpretation of the Sri Lankan Experience," *World Bank Economic Review*, Sept. 1, pp.35-63.
7. Brenner, Y.S. 1966. *Theories of Economics Development and Growth*, Praeger, New York.
8. Dasgupta, A.K. Jan. 26, 1954. "Keynesian Economics and Underdeveloped Countries," *The Economic Weekly*, pp.101-105.
9. Datta-Chaudhuri, M. 1990. "Market Failure and Government Failure," *The Journal of Economic Perspective*, Summer, Vol. 4, #3, pp.25-39.
10. Deane, P. 1961. "The Long Term Trends in World Economic Growth," *Malaysian Economic Review*, October issue.
11. DeQuincey's Eulogy of Riccardo, 1973, in John Neville Keynes, *Scope and Method of Political Economy*, 4th ed., August Kelly, London.
12. Flamming, R. 1979. "Economic Growth and Economic Development: Counterparts of Competitors?", *Economic Development and Cultural Change*, pp.47-61.
13. Furtado, C. 1964. *Development and Underdevelopment*, University of California Press, Berkeley.
14. Hicks, J. 1966. "Growth and AntiGrowth," *Oxford Economic Papers*, November.
15. Hirschman, A. 1958. *Strategy of Economic Development*, Yale University Press, New Haven.
16. Hosseini, Hamid. 1991. "From Homo Economicus to Homi-Islamicus: The Universality of Economic Science Reconsidered," in Zangemeh and Bina (eds.), *Modern Capitalism and Islamic Ideology*, Macmillan.
17. Johnson, G. 1987. "Agricultural Structural Prices," in Carbo, etc. *Growth-Oriented Adjustment Programs*, IMF & the World Bank, Washington, DC.

18. Kindleberger. 1965. *Economic Development*, MIT Press, Cambridge, MA.
19. Kraus, W. 1961. *Economic Development*, Wadsworth Publishing, Cal.
20. Krueger, A. 1990. "Government Failures in Development," *Journal of Economic Perspectives*, Vol. 4, #3, pp.9-23.
21. Kuznets, S. 1951. "Towards a Theory of Economic Growth," in R. Leckachman, *National Policy for Economic Welfare*, Doubleday, New York.
22. Leibenstein, H. 1957. *Economic Backwarders and Economic Growth*, John Wiley & Sons, NY.
23. Leiner, A. 1972. "The Economics and Politics of Consumer Sovereignty," *AER*, 62, pp.258-66.
24. Lewis, A. 1955. *The Theory of Economic Growth*, Allen & Unwin, London.
25. Lewis, A. 1984. "The State of Development Theory," *AER*, March, pp.1-10.
26. Lewis, A. 1991. "Roots of Development Theory," in Chenery, H. and T.N. Srinivasan, *Handbook of Development Economics*, Vol. I, North Holland, New York etc., second printing, 1991.
27. Loeb, G. 1957. *Industrialization and Balanced Growth*, J.B. Wolters, Groningen.
28. Lucas, R. 1988. "On the Mechanics of Economic Development," *Journal of Monetary Economics*, July #22, pp.3-42.
29. Machlup, F. 1963. *Essays on Economic Semantics*, Prentice Hall, NJ.
30. Maddison, A. 1970. *Economic Progress and Policy in Developing Countries*, W.W. Norton Co., New York.
31. Mandelbaum. 1947. *Industrialization of Backward Areas*, Blackwell, Oxford.
32. Marshall, A. 1895. "The Present Positions of Economics," in A.C. Pigou (ed.), 1966, *Memorials of Alfred Marshal*, August Kelly, New York.
33. Meier, G.M. & R.E. Baldwin. 1957. *Economic Development: Theory, History, Policy*, John Wiley & Sons, New York.
34. Meier, G.M. 1984. "The Formative Period," in Meier, G.M. and D. Seers (eds.), *Pioneers in Development*, Oxford University Press for the World Bank, Washington.
35. Meier, G.M. 1976. *Leading Issues in Economic Development*, third edition, Oxford University Press, NY.
36. Myint, H. 1965. "Economic Theory and Underdeveloped Countries," *Journal of Political Economy*, October.
37. Myrdal, G. 1957. *Economic Theory and Underdeveloped Countries*, Duckworth, London.

38. North, D. 1986. *Institutions, Institutional Change and Economic Performance*, Cambridge University Press.
39. Nugent, J. and Yotopoulos. 1976. *The Economics of Development: Empirical Investigations*, Harper and Row, NY.
40. Nurske, R. 1953. *Problems of Capital Formation in Underdeveloped Countries*, Oxford University Press.
41. Nutter, W. 1957. "On Measuring Economic Growth," *Journal of Political Economy*, February, #65.
42. Robbins, L. 1935. *Essays on the Nature and Significance of Economic Science*, 2nd ed., Macmillan, London.
43. Robbins, L. 1968. *The Theory of Economic Developing the History of Economic Thought*, Macmillan, London.
44. Rosenstein-Rodan, P. 1943 (June-Sept.) "Problems of Industrialization of Eastern and South-Eastern Europe," *Economic Journal*, #53, pp.202-211.
45. Rosenstein-Rodan, P. 1944. "The International Development of Economically Backward Areas," *International Affairs*, Vol. 20, No. 2.
46. Rosenstein-Rodan, P. 1955. "Programming in Theory and in Italian Practice," MIT Center for International Studies, December.
47. Rosenstein-Rodan, P. 1957. "Notes on the Theory of Big Push," MIT Center for International Studies.
48. Rosenstein-Rodan, P. 1984. "Natura Facit Saltum: Analysis of the Disequilibrium Growth Process," in Meier, G. & Seers, N. (eds.) *Pioneers in Development*, Oxford University Press of the World Bank.
49. Rostow, W.W. 1961. *The Stages of Economic Growth*, Cambridge University Press, NY.
50. Schumpeter, J. 1934. *The Theory of Economic Development*, (Translated from German), Harvard University Press, Cambridge.
51. Schumpeter, J. 1954. *History of Economic Analysis*, Oxford University Press, NY.
52. Schultz, T.W. 1956. "The Role of Government in Promoting Economic Growth," in L. White (ed.), *The State of Social Science*, University of Chicago Press, Chicago.
53. Scitovsky, T. 1954. "Two 'Concepts of External Economies'," *Journal of Political Economy*, February, Vol. 62, #2.
54. Sen, A. 1988. "The Concept of Development," in Chenery and Srinivasan (eds.), *Handbook of Development*, North Holland, Amsterdam, NY, Tokyo, Oxford.
55. Siamwalla, A. and S. Setboonsarng. 1989. *Trade Exchange Rate and Agriculture Pricing in Thailand*, World Bank Comparative Studies, Washington DC.

56. Srinivasan, T.N. 1984. "Comment," in Meier, G. Seers (eds.) *Pioneers in Development*, Oxford University Press for the World Bank.
57. Srinivasan, T.N. 1985. "Neoclassical Political Economy, the State and Economic Development," *Asian Development Review*, #3, pp.38-58.
58. Stanley, E. 1944. *World Economic Development*, International Labor Office, Montreal.
59. Stiglitz, J. 1986. "The New Development Economics," *World Development*, Vol. 14, #2, pp.257-267.
60. Stiglitz, J. 1988. "Economic Organizations, Information and Development," in Chenery, J.H. and Srinivasan, T.N. (eds.), *Handbook of Development*, North Holland, Amsterdam, NY etc.
61. Stiglitz, J. 1989. "Markets and Development," NBER, in Working Papers No. 296.
62. Stiglitz, J. and B. Greenwald. 1986. "Economies with Imperfect Information and Incomplete Markets," *Quarterly Journal of Economics*, May '78, pp.351-55.
63. Sun-Yat-Sen. 1922. *The International Development of China*, G.P. Putnam & Sons, NY.
64. Tinbergen, J. 1984. "Development Cooperation as a Learning Process," in Meier, J. & Seers (eds.), *Pioneers in Development*.