

DEPARTMENT OF AGRICULTURAL AND RESOURCE ECONOMICS AND POLICY  
DIVISION OF AGRICULTURAL AND NATURAL RESOURCES  
UNIVERSITY OF CALIFORNIA AT BERKELEY

---

**Working Paper No. 887**

**FALLACIES IN DEVELOPMENT THEORY  
AND THEIR IMPLICATIONS FOR POLICY**

by

Irma Adelman

---

Copyright © 1999 by Irma Adelman. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

---

---

**California Agricultural Experiment Station  
Giannini Foundation of Agricultural Economics  
May, 1999**

# FALLACIES IN DEVELOPMENT THEORY AND THEIR IMPLICATIONS FOR POLICY.

by Irma Adelman

## I. Introduction

No area of economics has experienced as many abrupt changes in leading paradigm since World War II as has economic development. Since economic development is a policy science, the twists and turns in development economics have had profound implications for development policy. Specifically, the dominant development model has determined policy prescriptions concerning the desirable: role of government in the economy; its degree of interventionism; the form and direction of interventionism; and the nature of government-market interactions.

Changes in both theory and policy prescriptions arise mainly from the following sources: First, there is **learning**. As our empirical and theoretical knowledge-base enlarges, new theoretical propositions, or new evidence concerning either resounding real-world successes or conspicuous real world failures, become apparent. These feed into new theoretical or empirical paradigms. Second, there are **changes in ideology**. As different power-elites ascend and wane, their ideologies ascend and wane with them. New ideologies provide new prisms through which to view both old theories and old policy prescriptions. When they are inconsistent with new fundamental values, they are reformulated so as to achieve congruence. Third, there are (exogenous?) **changes in the international environment**. When significant technological innovations, such as the Industrial or the Communications revolutions, or major global institutional transformations, such as the Post Bretton Woods architecture of the global financial system, take place, they can have major implications for both theory and policy. They can raise new issues, open new opportunities, or close old ones. Fourth, there are **changes in domestic institutions, constraints and aspirations**. The dynamics of development themselves fundamentally restructure institutions, relax some constraints while tightening others, and bring new aspirations to the fore. The **culture of the discipline**, which serves to structure the art of discourse and manner of argumentation in the discipline, determines how the previous four sources of change are incorporated into theories and models.

In the present paper, I will be concerned primarily with the impact that the culture of economics as a science has had on development economics. I will argue that the discipline of economics has enshrined the Keep It Simple Stupid (KISS) principle into an overarching tenet, imbibed in graduate school, that can only be violated at the violators own peril. This principle demands simple explanations and universally valid propositions. It has led to three major fallacies, with significant deleterious consequences for both theory and policy. I am not arguing for complexity for its own sake; rather, I am arguing for theories rich enough to portray the changing reality that is relevant for correct policy prescriptions.

In what follows, I shall consider three major fallacies arising from the KISS principle: (1) single-cause theories of underdevelopment; (2) a single-figure-of-merit criterion of development; and (3) the portrayal of development as a log-linear process.

## II. FALLACY I: UNDERDEVELOPMENT HAS BUT A SINGLE CAUSE.

The fundamental reason for the many sudden changes in dominant paradigm in development economics has been the (inherently misguided) search for a single-cause, and hence single-remedy, theory of underdevelopment. The specific form of argumentation has been structured by the KISS

principle and has remained fundamentally the same: underdevelopment is due to constraint X; loosen X, and development will be the inevitable result. The identification of the missing factor X has varied significantly over time, responding to empirical-historical learning from prior failures and successes, as well as to the other sources of paradigm-change enumerated above. The universal remedy for underdevelopment, X, thought to be both necessary and sufficient for inducing self-sustained economic development, has varied over time, and hence so have the recommendations for the optimal forms of state-market interactions and primary policy levers.

Alas, the search for a single open-Sesame, X, has been fundamentally misguided because it is based on a simplistic view of the mechanism of development and of the system in which it takes place. Unfortunately for the X-theory, as will be demonstrated in the fourth section of this paper, history demonstrates that the process of economic development is highly non-linear and multifaceted. Nevertheless, just like the futile search for the phlogiston in chemistry in medieval times, the naive search for the X-factor has guided theoretical and empirical research in economic development during the past half century. As a discipline, we seem to be unable to admit that the X-factor does not exist; that development policy requires a more complex understanding of social systems which combines economic, social, cultural and political institutions and their changing interactions over time; that interventions may have to be multipronged; that what is good for one phase of the development process may be bad for the next phase; that there are certain irreversibilities in the development process which create path-dependence; and hence that policy prescriptions for a given country at a given point in time must be anchored in an understanding of its situation at that point in time as well as how it got there, not only recently but on a historical time scale<sup>1</sup>. Thus, while there are certain regularities and preferred time sequences in the development process, universal institutional and policy prescriptions are likely to be incorrect.

We shall now proceed to an identification of the sequence of Xs. The portrait of changes in leading development paradigms will be somewhat overdrawn. Like leading countries in the world economy, older paradigms, even after they are dethroned, continue to persist in a subsidiary position for some time. They then essentially disappear from the realm of discussion. This is nowhere clearer than in the successive editions of Gerald Meier's book **Leading Issues in Development Economics**, whose content varies drastically from edition to edition. But what is not overdrawn is the monocausal nature of the explanations of underdevelopment and deficiencies in development performance. Some of the conference participants may feel offended by this portrayal of the theory they helped originate and enshrine. For this, I beg their forgiveness.

I would also like to emphasize at the outset that I do not contend that any of the theories presented below is completely wrong, in the sense of having no applicability to any country at any point in time. On the contrary, each of the theories presented below is applicable to some countries or groups of countries at particular points in their evolution. What I do deny, however, is that any of the theories presented below offers the necessary and sufficient conditions for underdevelopment; that relaxing any particular X will automatically lead to development, rather than to the emergence of a sequence of other binding constraints; and that there is a unique binding constraint X that applies to all countries at all points on their trajectory.

---

<sup>1</sup> David Landes (1998) makes a convincing case that the current travails of transition to market economy in Russia have their roots in the social structure prevailing in Russia under the tsars, in which the division of society into oppressed serfs, on the one hand, and profligate and incompetent noblemen, on the other, imprinted cultural attitudes which are inimical to interactions between labor, management and government based on honesty, public spiritedness and hard work.

I also do not contend that all development economists have been guilty of monocausalism. Just that the reigning paradigms have. Important exceptions to the monocausal view of development were offered by the classical economists, comparative economic historians, dependency theorists, and modernization theorists. However, in the spirit of the KISS principle, the work of all of these authors was largely ignored by the mainstream. Thus, the classical economists, from Adam Smith, through Marx and Schumpeter, had a multidimensional view of the grand dynamics governing the economic fate of nations. Indeed, the general analytic framework I used in my first book to present their theories as special cases (Adelman 1958) was based on an expanded production function whose arguments consisted of vectors describing not only the physical resources used in production, but also the technical knowledge applied in various sectors, and the different social and institutional structures within which the economy operates. Economic historians, such as Abramovitz (1986), Kuznets (1966), North (1973 and 1990), and Landes (1969 and 1998), all had a multidimensional view of the sources of economic progress, which included institutions, culture and technology. So did Polanyi (1944) and Myrdal (1968) and the dependency theorists, such as Baran (1957) Furtado (1963) and their followers. They all viewed economic retardation as being due not to resource constraints but rather to inimical domestic political structures, adverse international institutions and to path dependence. Finally, modernization theorists, such as Black (1966), Hoselitz (1960), Inkeles (1966), Lerner (1958) and Adelman and Morris (1967) all adopted a multi-indicator theory of development including transformations of production structures as well as social, cultural, and political modernization.

We now turn to a brief sketch of the sequence of mainstream theoretical paradigms.

## **II. Alternative Theories of Economic Development and Their Implications for the Role of Government.**

### **X equals Physical Capital (1940-1970):**

The experiential roots of economic development can be found in the reconstruction of Western Europe after the end of World War II. There, the Marshall Plan, which financed the reconstruction of infrastructure and physical capital destroyed by the second World War, led to very quick economic recovery. By analogy, it was assumed optimistically that, with decolonization, a similar injection of finance into developing countries would lead to their rapid economic development. The proposition that a deficiency in capital is the fundamental cause of underdevelopment was the basic principle on which the World Bank (originally called the International Bank for Reconstruction and Development), the IMF, and bilateral foreign assistance programs were established. The charters of these international institutions reflect this philosophy as did their activities. Both multilateral and bilateral aid programs concentrated on supplementing the meager domestic savings available for domestic investment on concessionary terms. They financed externality-generating, large infrastructural projects in transport and energy almost exclusively and took the form of project, rather than program, assistance. Partial-equilibrium-based project analysis was the main tool used to evaluate whether a proposed project should be financed or not. The macroeconomic implications of foreign assistance were almost totally ignored as were the social and economic institutional requirements for project implementation.

The intellectual roots of economic development can be found in the writings of the pre Marshallian classical economists, from Adam Smith on, and of their immediate post World War II followers, W.Arthur Lewis (1954), Rosenstein Rodan (1943), Nurkse (1952), Prebisch (1950), Hirshman (1958) and Leibenstein (1957), the classical development theorists. The classical development theorists viewed economic development as a growth process that requires the systematic reallocation of factors of production from a low-productivity, traditional technology, decreasing

returns, mostly primary sector to a high-productivity, modern, increasing returns, mostly industrial sector. But, unlike the later neo-classical development economists who assume that there are few technological and institutional impediments to the requisite resource-reallocation, classical development economists assume that the resource reallocation process is hampered by rigidities, which are both technological and institutional in nature. Investment lumpiness, inadequate infrastructure, imperfect foresight, and missing markets impede smooth resource transfers among sectors in response to individual profit maximization and provide the bases for classical, structuralist approaches to economic development.

Much of the economic debate of the period centered on how to raise the national rate of savings beyond the threshold level of 15% (see, e.g. Rostow 1960). All development economists saw foreign capital inflow as one answer to the low capacity to save of developing countries. They, therefore, favored negative balances of trade, with the gap between imports and exports used to finance the difference between the levels of domestic savings and domestic investment. Most classical development economists favored a slightly inflationary framework to mobilize the necessary finance. Most regarded development-oriented governments as having a major role in the direct provision of finance, the subsidization of investment, and the direct undertaking of investment in infrastructural and "basic" industrial projects. These governmental activities were required to generate external economies and stimulate increased private resource reallocation from agriculture to industry. The development economists of this era understood that both direct government investment and the provision of subsidized capital implied deficits in the government budget and would lead to some degrees of inflation, hopefully not too high and eventually diminishing as the production financed in an inflationary manner came on line. Some development economists contended that a "big push" of simultaneously undertaken investments would maximize the external economies generated by investment and generate self sustained, induced growth faster. Others contended that "balanced growth" would reduce the bottlenecks and import needs of the investment programs and thereby raise the marginal efficiency of investment.

Classical development theorists recognized that long-run economic growth is a highly non-linear process. This process is characterized by the existence of multiple stable equilibria, one of which is a low-income-level trap (e.g. Leibenstein 1957). They saw developing countries caught in the low-income-level trap, which occurs at low levels of physical capital, both productive and infrastructural, and is maintained by low levels of accumulation and by Malthusian population growth. They argued that industrial production is subject to technical indivisibilities, which give rise to technological and pecuniary externalities. However, coordination failures lead to the realization of systematically lower rates of return from investments based on *ceteris paribus*, individual, profit maximization than those that could be realized with coordinated, simultaneous investment programs. Uncoordinated investments would not permit the realization of the inherent increasing returns to scale and, together with low incomes, which restrict levels of savings and aggregate demand, and Malthusian population growth, ensnare an economy starting at low levels of income and capital in a low-income-level trap. Hence the need for government action to propel the economy from the uncoordinated, low-income, no-long-run-growth static equilibrium to the coordinated, high-income, dynamic equilibrium, golden-growth path. In his seminal paper, **Problems of Industrialization of Eastern and South Eastern Europe**, Rosenstein Rodan (1943) posited the need for a government-financed series of interdependent investments, to take advantage of external economies and economies of scale and propel developing countries from a low level equilibrium trap, with no growth in per capita income, to a high-level equilibrium path, characterized by self sustained growth. Development, they argued, could not be induced purely by market forces.

Classical development economists were not unaware of the potential of international trade for stimulating economic growth (see for example Nurkse 1952). This is important because, if trade were enough to induce the requisite resource-reallocation process, permit the capturing of scale economies and launch countries into a self-sustaining development process, there would, of course, be no need for direct government finance or direct government investment in infrastructure and industry. Free trade would induce domestic entrepreneurs to make the appropriate investments without special government intervention. However, the classical development economists believed that international trade would not, in and of itself, suffice to induce development. Their first counterargument against the "trade will do the job" view was based on elasticity and terms of trade pessimism (Prebisch (1950) and ECLA). In turn, their pessimistic assessment of the development-inducing potential of free trade was based on the fact that, prior to World War II, the growth process stimulated by the European Industrial Revolution in the overseas territories prior was purely cyclical and was not accompanied by favorable structural change except when the overseas territories had sufficient political autonomy to permit them to impose import barriers.

In addition, the proponents of the "trade is not enough" view also argued that even if one were to concede that trade could expand sufficiently to provide the necessary growth stimulus, trade by itself would not suffice to promote development because: (1) non-price barriers militate against the smooth transfer of resources among sectors in response to individual profit maximization; (2) in the absence of government action, the divergence between rates of return from uncoordinated and coordinated investments entangles the economy in the low-income trap; (3) the necessity to learn-by-doing implies the need for some initial infant-industry protection; and (4) non-tradables, in the form of physical and social infrastructure, are required to enable competitive domestic industry to emerge. Both the physical infrastructure, in the form of transport and energy, and the social infrastructure, in the form of requisite property rights, market institutions, social and political structures, and economic and political cultures are lumpy, and hence subject to increasing return to scale. Neither form of infrastructure will therefore emerge spontaneously in response to uncoordinated, market incentives<sup>2</sup>. In the view of the classical development economists, the conjunction of these factors leads to the need for government actions to initiate the process of economic development. For, in the absence of appropriate government intervention, the Heckscher-Ohlin factor-price equalization theorem will not prevent the emergence of a low-income equilibrium trap.

### **X equals Entrepreneurship (1958-1965)**

Around the mid-nineteen sixties development economists and development policy makers realized that there were serious absorptive capacity constraints to foreign assistance: Beyond a certain point the injection of extra capital became subject to sharply diminishing returns.

As a result, the provision of foreign aid and the undertaking of government-sponsored investment projects were failing to induce sufficiently rapid growth of privately owned and managed industry. This failure was attributed to missing entrepreneurship. There were simply not enough potential industrialists willing and able to undertake industrial projects, especially when commercial, import-license related, and "non-productive" real estate investments provided such high rates of return in the inflationary and protected trade environments generated by government-sponsored, accelerated

---

<sup>2</sup> J. Bhagwati (1996) demonstrates that, with increasing returns in a nontradable intermediate goods sector, opening up the economy to international trade will not suffice to induce entrepreneurs to invest in the modern sector and obviate the need for the "big push". **The "Big Push" in an Open Economy with Non Tradable Inputs** (mimeographed).

development.

A Schumpeterian school of economic development emerged which studied the social origins of entrepreneurship. Also, a socio-cultural school of economic development (Hagen (1962) and McClelland(1961)) sought to analyze the socio-cultural and psychological barriers to entrepreneurial attitudes and the differences in the prevalence of entrepreneurial attitudes among different cultures.

The classical development theorists provided several policy responses to the "deficiency in entrepreneurship" diagnosis: Most argued that, in the absence of private entrepreneurship, governments would have to perform the entrepreneurial job while at the same time fostering the development of a cadre of private entrepreneurs willing and able to take over. Governments could foster the development of a cadre of private entrepreneurs by artificially increasing the rates of return from private investment through direct government subsidies; by engaging in joint government-private ventures; and by subsidizing management training programs. Others, (primarily Hirshman) argued that what was necessary was to economize on the need for private entrepreneurial talents by making the activities in which private investment would yield high returns more obvious, through unbalanced growth.

The realization that industrial entrepreneurship was scarce did not challenge the need for a continued substantial role of government in development. On the contrary, it reinforced it. By recognizing that a critical complementary factor to the government's efforts to promote development was missing, it emphasized that government policy would have to pay attention to ways of structuring its own activities so as to increase its supply.

In the foreign aid area, the "missing entrepreneurship" school led to the establishment of the International Finance Corporation (IFC) within the World Bank for financing private entrepreneurial activity in developing countries. Aid programs began to funnel resources into training projects for the education of a cadre of potential entrepreneurs and policy makers in less developed countries. The Economic Development Institute (EDI), for teaching economics and management, was established within the World Bank.

### **X equals Incorrect Relative Prices (1970-1980)**

Several International Labor Organization missions (Emmerij 1986) were organized in the early seventies to analyze the employment situation in developing countries. Their reports concluded that, despite high rates of economic growth and industrialization, overt unemployment and underemployment were very high, of the order of 20% of the urban labor force. Not only was unemployment high but it had also increased with the process of industrialization. The high rates of unemployment were in turn inducing an unequalizing process of economic growth: the owners of capital (the rich) and the owners of skills complementary to government-sponsored, capital-intensive development (the professional and bureaucratic middle class) were growing richer, while the owners of unskilled labor were not benefitting proportionately. Skilled and semi-skilled workers that had been absorbed in modern industry had become middle class while the unemployed and underemployed workers in low-productivity sectors (agriculture and unskilled services) and in low-productivity enterprises (workers in small scale firms using traditional technology) were falling increasingly behind.

Several different reasons were offered for this development-failure. Some argued that the major culprit was inappropriate technology, that was too capital-intensive (Streeten 1986); others contended that the major fault lay in too rapid a rate of rural-urban migration (Harris and Todaro 1970); still others saw the deficiency as arising from the relative bias towards inherently capital-intensive, large-scale formal industry and the corresponding neglect of more labor-intensive, small-scale and informal sector employment. But, fundamentally all these explanations rested on the contention that the process

of government-sponsored accelerated development had given rise to incorrect relative factor prices that did not reflect fundamental relative economic scarcities: The government-subsidization of capital had led to capital being underpriced relative to its true abundance and labor being overpriced both relative to capital and relative to its true scarcity. This had resulted in the adoption of inappropriate technology, induced not only by incorrect relative factor prices but also by the direct transplantation of modern technology from developed countries where capital-labor ratios were much lower than in developing countries. The migration explanation rested in part on the fact that unskilled wages in the urban-industrial sector were between twice and three times as high as rural per capita incomes. Even with 20% urban unemployment, the expected urban wage far exceeded the actual rural per capita income and therefore rural-urban migration would continue, swelling the ranks of the urban unemployed and underemployed. Rapid rural-urban migration was also due to a process of industrialization that was forcibly transferring resources from agriculture to industry by lowering the agricultural terms of trade through foreign-assistance-financed imports of grains, thereby keeping rural incomes low. The urban, large-scale industry bias of development policy subsidized capital for large scale industrial enterprises while keeping the price of capital high for small scale and informal sector activities. The unfavored sectors therefore had to pay low wages and could not expand their levels of employment sufficiently to absorb the entire pool of unemployed. In any case, whatever the reasons for the relatively high capital-intensity of development, the remedy was "getting prices right", by reducing direct and indirect subsidies to industrialization. Raising interest rates on loans to large-scale industry and reducing tariff protection to capital-intensive, import substituting industries were the policies needed to reduce overt urban unemployment.

Those who focused on the income distribution problem directly came to the conclusion that what was fundamentally wrong was not that relative factor prices were incorrect, but rather that the labor-intensity of growth was too low (Adelman and Robinson 1978). They contended that the most effective way to remedy this major deficiency was not to change relative prices directly but rather indirectly, through choice of more labor-intensive sectors for government promotion and government-promoted exports. The result would be a different growth pattern that would combine higher growth rates of per capita income with higher labor-output ratios and with the expansion of high-productivity unskilled and semi-skilled employment. The end result would be a combination of accelerated growth with a non-deteriorating distribution of income. Streeten and Stewart (1976) argued that multipronged, simultaneous reforms of institutions, markets and technology were required to remedy the unemployment/income distribution problems; single interventions might only make matters worse.

While the classical development economists realized this only imperfectly at the time, the "getting-prices-right" school marked the beginning of ascendancy of the neo-classical school of economic development. Rather than argue for different forms of government intervention, the "getting-prices-right" school opened the door to the argument that government intervention should be curtailed, since it had obviously been counterproductive. The income distribution school continued to argue for a direct role of government in the economy, but called for a change in focus away from capital-intensive "basic" industries towards labor-intensive consumer goods industries suitable for both domestic production and for exports. The day was carried however by the "getting prices right" school.

### **X equals International Trade (1980-)**

While this is a continuation of the "getting prices right" line of thought, its arguments against government intervention in the economic arena are sufficiently different to merit a special paradigm. The proponents of this school argued that the government-promoted, protection and subsidy ridden industrialization process of the past decades had led to inefficient growth by generating distortions in



industry which kept it inefficient and noncompetitive. The government-sponsored industrialization process of the past was therefore too costly and too far removed from the basic comparative advantage of the countries involved. Rather than urge governments to adopt different policies, the best remedy would be to look for a deus-ex-machina different from government to stimulate development. Such a deus ex machina could be provided by international trade.

Neo-classical trade theorists (Krueger(1979 and 1983), and Bhagwati (1985)) came to dominate the field of economic development. The neo-classical economic development theorists emphasize that international trade can provide a substitute for low domestic aggregate demand. They argue that the main thing governments need to do to position an economy on an autonomous, sustained-growth path is to remove barriers to international trade in commodities<sup>3</sup>. According to this "trade is enough" school of thought, export-led rapid economic growth would be the inevitable result. Comparative advantage, combined with the Hecksher-Ohlin theorem, would then do the rest. Governments should also remove price distortions in domestic factor and commodity markets ("get prices right") to induce suitable movement of factors among sectors, encourage the adoption of appropriate technology, and increase capital accumulation. In this view, domestic and international liberalization programs would suffice to bring about sustained economic growth and structural change.

To the extent that economies are trapped in the low-level equilibrium trap by deficient aggregate demand, international trade can indeed provide a substitute for deficient domestic demand. However, the moment one acknowledges that nontradable intermediate inputs, such as transport and power, are needed for efficient domestic production in modern manufacturing, international trade cannot obviate the need for a Big Push to lift the economy out of the low-level-equilibrium trap and hence provide a perfect substitute for a government-promoted investment program into domestic infrastructure and interrelated industrial investments.

Classical development economists argued that development in an open economy would proceed faster and more efficiently. But for them and their followers openness did not mean free trade. They favored mercantilist trade policies. They thought that initial import substitution to provide infant-industry protection combined with selective export promotion were needed to initiate development.

### **X equals Hyperactive Government (1980- 1996)**

This view represents the culmination of the neoclassical counter-revolution in economic development that was initiated by the "getting prices right" and "trade is enough" schools. Not coincidentally, the "evil-government" school started its life under the Reagan-Thatcher era of neo-liberalism. According to its view, government is the problem rather than the solution to underdevelopment (Krueger 1979). On the one hand, government interventions are not needed, as trade liberalization can induce development, provide for economies of scale and make industries internationally more competitive. Greater domestic marketization of goods and services, including public goods, would make development more cost-effective and efficient. Governments are bloated; they are corrupt; they accept bribes for economic privileges generated by government interventions into the market; and they operate by distorting market-incentives in mostly unproductive, foolish and wasteful ways. Moreover, their discretionary interventions into markets, through regulation, tariffs, subsidies, and quotas, give rise to rent-seeking activities by private entrepreneurs, which absorb large

---

<sup>3</sup> The models of Basu (1984) and Murphy et al (1989), which produce low-level equilibrium traps in a closed economy, lose the trap in an open economy, although Murphy et al claim that their model does not. By contrast, in Bhagwati (1996) the low-level equilibrium trap persists when the economy is opened up and the need for a Big Push persists. The distinction arises when deficient aggregate

fractions of GNP and lead to significant economic inefficiencies. As a result, reducing the role of government in the economy would lead to more rapid and more efficient development.

Under these circumstances, the best actions governments can undertake to promote development is to minimize their own economic roles. Liberalizing domestic and international markets for both factors and products is the prescription of choice. Acts to promote the spread of markets and the rule of market incentives would improve the efficiency of the economy. Such acts would, in and of themselves, be taken as an indication of economic virtue, worthy of financial support by international agencies. A corollary of this view is that starving the public sector of resources is a worthwhile undertaking, in and of itself.

The "evil government" period was one of general slowdown in the world economy. It was marked by a recession in Japan, Europe and the United States; a shift from growth-promoting to inflation-fighting policies in developed countries; a slowdown in the growth of world trade and an increase in trade restrictions in developed countries; a rise in world interest rates and an effective devaluation of currencies against the dollar; the second oil-shock; and a severe debt-crisis in developing countries. All of these ushered in a decade of drastic economic decline in developing countries. During the nineteen eighties developing countries': average rates of economic growth either declined or became stagnant; balance of payments constraints became increasingly binding; priorities shifted from economic development to achieving external balance mostly through restrictive macroeconomic policies. Most developing countries experienced: rampant inflation; capital flight; low investment rates; drastic declines in living standards; increases in inequality and substantial increases in urban and rural poverty. The average developing country transferred more than its entire growth of GDP abroad annually, for debt service. Nevertheless, the debt of developing countries has continued to increase, as two thirds of them could not achieve a current-balance-surplus sufficient to service their debts.

The period was marked by a decade of debt crisis, structural adjustment, and policy reform. The debt crisis was brought to a head by the inability of Mexico, Brazil and Turkey to meet their debt-service obligations. As a result, commercial banks in developed countries became unwilling to extend further loans to **all** developing countries. Therefore, developing countries became completely dependent on the Washington-based international institutions, the IMF and the World Bank, for their economic survival. These institutions, in turn, took advantage of this opportunity to enforce their "evil government" philosophy on developing countries through their loan conditionality. The combination of "Marketize, Liberalize and Tighten- your-Belt Policies" dubbed "The Washington Consensus" became the slogan of development policy during this period. As a result, many of the economic and political institutions that form the core of capitalist development were created in a significant number of developing countries.

It is curious how completely neoclassical development theory came to dominate the policy agenda during this period despite its numerous theoretical deficiencies. First, neoclassical development economics ignored the fact that Marshallian neoclassical economics was never intended to be a growth theory; only a theory of static resource allocation. It therefore must be supplemented by a theory of accumulation and growth to be a complete development theory. It is possible for markets to be efficient for static resource allocation and be inefficient vehicles for accumulation and growth. Indeed, this is what classical development theorists would contend. Second, neoclassical development theory also ignored the fact that the postulates of neoclassical economics, which are needed to ensure the efficiency of neoclassical market equilibria, are not applicable to developing countries. Developing countries are hardly characterized by smoothly mobile factors; complete and well functioning markets; comprehensive information; and perfect foresight. In short, the institutional bases for a neoclassical economy are missing in most developing countries, and cannot be created overnight. But the absence

of any of these characteristics implies that market equilibrium cannot be proven to be Pareto-optimal, and hence even statically efficient. Third, market equilibria depend on the initial distribution of wealth.

If that distribution is not optimal, the Pareto optimality of a neoclassical economy will not maximize even static social welfare. Fourth, the advocates of neoclassical development also ignored the theory of the second best. Since it is impossible to remove all regulatory constraints on markets, it is quite feasible that, even when all neoclassical postulates hold, adding additional constraints on markets will improve, rather than reduce, market efficiency. Finally, all the objections to the "trade is enough" theory also apply to the "evil government" theory of development.

### **X equals Human Capital ( 1988- ).**

A different, more recent, underdevelopment theory associated with the Chicago school (Lucas 1988 and Romer 1986), identifies low-human capital endowments as the primary obstacle to the realization of the economies of scale inherent in the industrialization of developing countries. The productivities of raw labor and capital are assumed to be magnified by a factor,  $A(k)^a$ , that reflects the levels of human capital and knowledge,  $k$ . There are different potential dynamic growth paths open to countries: At one extreme, identified with low levels of human capital and knowledge, economic growth is characterized by low degrees of economies of scale; the corresponding growth path is therefore a low-factor-productivity, low-growth one that tends to a stationary state characterized by low per-capita income levels. At the other extreme, identified with high levels of human capital and knowledge, economic growth is subject to increasing returns to scale; the corresponding growth path is a high-factor-productivity, high-growth one that tends to a stationary state characterized by high levels of per-capita income. According to this view, investments in human capital and knowledge are therefore all that governments must do to propel developing countries from a low-growth trajectory to a high-growth one.

The "human capital is enough" development theory is open to objections which are analogous to the ones raised against the "trade is enough" development theory: (1) non-price barriers militate against the smooth transfer of resources among sectors that is necessary to take advantage of potential scale economies; (2) missing markets, especially for capital, are likely to impede private individuals from undertaking the investments necessary to take advantage of potential scale economies; (3) appropriate trade policy is required to bring about the realization of the potential economies of scale inherent in industrialization: the necessity of learning-by-doing implies the need for some initial infant-industry protection, while the low aggregate demand induced by low income levels implies the need for export-led growth; and, last but not least, (4) physical and institutional infrastructures are required to enable competitive domestic industry to emerge. Both forms of infrastructure must be provided by modernizing governments if the economies of scale posited by the Chicago production function are to materialize.

### **X equals Ineffective Government ( 1997-)**

Several forces coalesced to lead to a reevaluation of the optimal role of government in economic development. First, economists came to realize that, while the growth performance of most developing countries during the 1980s had been poor, that of East Asian and some South Asian countries, in which governments continued to play an active role, had been remarkably good. Despite the unfavorable international environment of the eighties, these countries were able to maintain, and, in some cases, even improve upon their previous development momentum. Rather than adopting deflationary government expenditure and macroeconomic policies and restrictive import and wage practices, the successful Asian countries exported their way out of the crisis. Their governments shifted

from import-substitution to export-promotion regimes; devalued to promote expenditure switching among imports and domestic goods; undertook a set of market-friendly institutional and policy reforms; continued to invest in infrastructure and human capital; and engaged in the direct and indirect promotion of selective industrial policy (World Bank 1993 and Stiglitz 1996). Second, there was a backlash in the OECD countries against the neo-liberal philosophy of the eighties, which had led to slow growth and high unemployment, towards a more activist governmental stance. Democrats replaced Republicans in the United States; Labor-Governments replaced Conservative governments in most European countries; and the international influence of Japan, whose government had always played a very active economic role, increased. Third, the mixed success of LDCs with market-reforms during the eighties (Nogues and Gulati 1992) led international institutions to understand that it takes capable, committed governments to promote and manage successful reform (World Bank 1997). Without capable governments, even market-oriented reform efforts will flounder and be derailed or captured by special interest groups of actual or potential losers from reform. A "revisionist" school of economic development, dubbed "The Post Washington-Consensus" appears to be now in the making. This school advocates a dynamically changing mix of state-market interactions, in which developmental governments play a significant role in investment, its finance, human capital formation, acquisition of technology, institution-setting, and the promotion of policy and institutional reforms. Development economics is returning full circle to the view that government must play a critical role in economic development that had been held by the classical development economists. However, whether "The Post Washington Consensus" school will survive the combination of East Asian financial crisis, which is presumed by some to cast doubt upon the institutions of government-corporate capitalism, and the recent sex scandal in the United States, and War in Yugoslavia, which may sweep the democrats out of office, remains an open question.

### **III. FALLACY II. A SINGLE CRITERION SUFFICES TO EVALUATE DEVELOPMENT PERFORMANCE.**

I will not dwell extensively on this fallacy since it is well appreciated in the literature. The deficiencies of per capita GNP as a performance criterion have been extensively analysed (see, e.g. Sen 1988). Suffice it to say that the growth of GNP is indicative only of the extent of national **potential** for improving the welfare of the majority of the population-- not the extent to which the society delivers on this potential. At a minimum, a more multidimensional criterion, such as the Human Development Index (UNDP various years), which takes account of dimensions of human welfare other than income, supplemented by a distribution sensitive measure of aggregate income, such as that offered by Atkinson (1976), is required to achieve a minimal appreciation of actual, rather than only potential, national development performance. I would personally prefer that a battery of disaggregated performance indicators, such as that originally proposed by Adelman and Morris (1967) or that currently advocated by Wolfenson (1998) and Stiglitz (1998), be used as indices of the current state of national welfare and its likely future evolution. A more multidimensional statistical base for monitoring development would have enabled much earlier identification of the deficiencies of growth-oriented development policies during the fifties and sixties as well as an earlier appreciation of the immense human costs of structural adjustment policies in Latin America during the eighties. Improved development strategies and better responses to macroeconomic and financial crises could then have been evolved earlier on and much human suffering avoided.

### **IV. FALLACY III: DEVELOPMENT IS A (LOG) LINEAR PROCESS**

Following Solow (1957), a single production function is assumed to characterize all countries. This unique production function is presumed to be a function of the supply of inputs, capital, labor and natural resources. Country deviations from this production function are taken to represent productivity differences, whose source is left undefined. Accordingly, the rate of growth of total output becomes a function of the rate of change of the physical inputs; that of per capita output (=per capita income) becomes a function of the rate of change of the capital labor ratio, the rate of change of the per capita endowment of natural resources (usually assumed to be zero) and the rate of change of the residual. More recently, cross country empirical studies of the rate of growth of per capita GNP "explain" the rate of growth of the residual by assuming that it is a function of the X-factor of the day: the economy's openness (Krueger op cit; Balassa 1989; and Bhagwati op.cit); or the degree of development of capitalist institutions (De Melo et al 1996 and World Bank World Development Report 1993); or the availability of human capital (Lucas and his followers); the degree of democracy (Barro 1996 and his followers); the degree of corruption (Mauro 1995); or the degree of development of political institutions (Campos and Nugent 1996).

The unique production function approach leads to several erroneous implications. It suggests that: (1) initial conditions do not matter; (2) levels do not matter; (3) there is no path-dependence; and hence that (4) universal policy prescriptions apply to all countries at all points in time, regardless of their current state of socio-institutional and economic development, political structure and policy objectives. Both the World Bank and the IMF have fallen prey to this postulate of universality and used a cookie-cutter approach in their policy prescriptions. They dismissed as special pleading attempts by LDC governments to argue that particular necessary conditions for the effectiveness of some policy prescriptions did not apply to their countries .

Unfortunately, there is ample evidence from both econometric analyses, and historical case studies that the log-linear, single-path, single-factor view of economic development is both erroneous and a-historical. The following propositions invalidate this view:

### **Proposition One: The Development Process is highly non-linear:**

Evidence:

**One**, in his original cross country studies of development Chenery and his many co-authors found the best fit to be non-linear in logs. He related intercountry differences in GNP to both the logs of the levels of per capita GNP and population and the logs of their squares.

**Two**, as elaborated in in the next section, interaction patterns among economic, social and political institutions vary by level of socio-economic development. The models of change thus differ in a systematic fashion as countries get to higher levels of economic development.

**Three**, and more tellingly, not only do models of socio-economic and political alter as countries evolve, but even the same institutions and sectoral policies are transformed in predictable ways as development proceeds (Morris and Adelman 1988 and Adelman and Morris 1989). The roles of government, agriculture, international trade, and politics alter as economies advance.

**Take governments:** Initially, their primary roles consisted of social development, institution-creation, both economic and political, and infrastructure-buildup. The 19th century governments of the European latecomers first introduced the institutional changes required to strengthen responsiveness to market incentives during the early phases of the Industrial Revolution. They unified their countries and markets, as in Italy and Germany; eliminated legal barriers to trade and factor mobility, as in the Russian serf-emancipation; created credit institutions and promoted joint-stock companies, as in

Germany; and facilitated transactions, as in Italy and Spain.

Next, once the institutional and physical frameworks for development were established, the primary function of government consisted of the promotion of industrialization while raising the productivity of agriculture. Both during the 19th and twentieth centuries, an activist government that promotes the acquisition of dynamically changing comparative advantage was needed to attain the successive stages of industrialization. At this point the government both itself undertook and used finance and subsidies to promote increasingly technologically more sophisticated interdependent, externality-inducing investments. It introduced the policy regimes needed to increase the profitability of private investment, through protection and subsidies. And it substituted for inadequate or missing markets and factors, finance, technology, and skills. Climbing the ladder of comparative advantage became the main thrust of government economic policy. This required changing international trade and commercial policies as well as reorienting government finance, government investment and government incentives. In each phase of industrialization, initially infant-industry protection had to be accorded to the key sectors. But once infant industries had become established, the goals of industrial policy with respect to that sector had to change towards creating an export-competitive industry: at that point, infant-industry protection had to be gradually withdrawn and replaced by pressures and incentives to export. The government also had to maintain a certain degree of macroeconomic stability; selectively promote not only foreign but also domestic competition; help upgrade human resources and skills; and foster social development.

Similarly, **agriculture's** main function also had to alter with development. As we learned from Lewis, initially the main job of the agricultural sector is to supply resources for the start of industrialization. Agriculture's main original purpose is to: release labor; accumulate and transfer capital; and earn foreign exchange. In this phase, agricultural institutions must primarily enable the mobilization of the agricultural surplus and its transfer to the industrial sector; large estates, worked with semi-attached labor, and low agricultural terms of trade were best suited for this phase. Later, to enable industrialization to continue beyond a small enclave, agriculture must be capable of providing abundant food to the growing urban sector and supplying markets for urban manufactures. In this later phase, the institutional structure of agriculture, terms of trade policies and investments in agricultural infrastructure must switch so as to yield incentives for improvements in the productivity of food agriculture. In addition, to enlarge the size of the domestic market for home-produced manufactures, the agricultural surplus must now become sufficiently widely distributed to enable widespread farmer-income growth. At this stage, owner-operated farms, of productivity and size sufficient to generate a marketable surplus, are best. So, both historically and in our contemporary studies, we found that at low levels of development large estates were associated with more rapid growth and industrialization while at later stages, owner-cultivated farms were related to faster development.

The story with respect to **international trade** is similar. Not only should the major functions of government and the nature of agricultural institutions shift as development proceeds, but trade policies in support of industrialization must change as well. First, trade must open up possibilities for structural change in the economy's production patterns; to this end it must generate sufficient domestic incentives to induce investment in, initially inefficient, infant-industry industrialization. At the same time, trade must enable the economy to earn the foreign exchange and buy the machinery and raw materials required for industrialization. In that phase, import substitution, promoted by modest subsidies, tariffs and quotas, is the trade policy of choice. Next, trade and government-investment policies must be structured so as to foster the continual acquisition of comparative advantage in higher value-added, technologically more sophisticated industries. Exchange rate policy becomes critical in this phase. In this transitional phase, trade policy should become selective. A gradual withdrawal of

protection from adolescent industries, unifying and lowering tariff rates and abolishing quotas on the older infants, to force increasing their competitiveness, should be combined with selective, temporary, protection of new infant-industries. It is only when the economy has acquired the full panoply of industries characteristic of industrial economies, that it should shift to completely free trade in order to induce increases in the competitiveness of domestic industry. Trade must now be allowed to act as a source of competition and a provider of economies of scale by exposing domestic industry to foreign competition and by enlarging markets for domestic industry.

These lessons concerning the dynamically changing trade-policy requirements are apparent both from the Industrial Revolution and from the policies adopted by the currently most successful industrializers, in East Asia. All 19th century late industrializers practiced import substitution before shifting to export-promotion. Even the first-comers to the Industrial Revolution, who had no international competition at the time, had used mercantilist policies during the period preceding the Industrial Revolution. By the same token, both Korea and Taiwan, the most rapidly industrializing countries in the world, practiced import substitution for a short initial period. They then shifted to export-orientation, rather than to free trade, and combined selective protection in successively higher industries with selective liberalization in earlier industrial specialties.

Finally, **political transformations** were also required to enable successful development. At first, as we learn from nineteenth-century overseas territories, the establishment of political stability and political support for the promulgation of laws furthering market development were sufficient to promote rapid primary-export expansion. Dependent politics were sufficient for this stage. But unless the political institutions later adapted so as to provide support for the economic needs of rising domestic commercial and industrial classes, as in Australia, New Zealand and Canada, the translation of the initial impetus from exports into long term economic development became blocked, as in Argentina and Brazil. At that point a certain degree of domestic political autonomy became necessary

### **Proposition Two: Development Paths are not Unique.**

Evidence:

**Point A: Currently Developed Countries have followed Alternative Paths to Development.**

We can distinguish at least three major distinct paths pursued by well defined groups of countries during the Industrial Revolution (Morris and Adelman, 1988):

(1) **The largely Autonomous Industrialization of the First Comers to the Industrial Revolution** (Great Britain and the United States) In these countries there was virtually no direct government investment in productive enterprises and very little direct financing of investment in industry and agriculture. Moreover, private enterprise financed a substantial amount of investment in infrastructure, promoted by large government-subsidies to private investment. For example, in the United States, private investment in canals and railroads was subsidized through land grants to private entrepreneurs along rights of way.

However, even in Great Britain and the United States, where the direct economic role of governments was least, governments had a pivotal function in promoting the Industrial Revolution. By 1870 in the United States and 1850 in Great Britain, they had removed all premodern constraints on markets, had eliminated major legal barriers to national mobility of labor (such as slavery in the United States), and had commercialized land transactions. They had created limited-liability companies and had eliminated barriers to direct foreign investment. Prior to the Industrial Revolution, the British government had defended British entrepreneurs against outside competition through significant tariff

protection and through discriminatory shipping rules. Subsequently, British industrialization and competitiveness were promoted by shifting to free trade so as to enable cheap raw material and food imports from the Commonwealth Countries. Moreover, throughout the 19th century, the British government opened up its overseas territories to British industry by imposing free trade on its colonies and by investing in inland transport (e.g. Indian railroads) in the colonies and . It also provided externalities for private British ventures overseas, by paying an important portion of the security and administrative costs of the colonies, and by developing capital markets which enabled the export of enormous amounts of capital.

(2) **The Government-Led Industrialization Process of the Late Comers to the Industrial Revolution** (e.g. France, Italy, Spain, Japan, Russia and Germany). In contrast to the partially autonomous path of the First Industrializers, in the 19th century latecomers, the degree of government promotion of industrialization was substantial and positively, though not perfectly, correlated with the magnitude of the development gap between Great Britain and the country in question. The role of government was especially active in industrializing countries that were moderately backward but had administratively capable governments.

The governments of the latecomers responded to the military, political and economic challenges posed by Great Britain's Industrial Revolution by using a large variety of instruments to promote industrialization: general and targeted subsidies; tariffs; incentives; monopoly grants; quantitative restrictions; licensing; tax privileges; and even forced allocation of labor (Landes 1998, p 235). Challenged by Britain's industrialization, governments enlarged the sizes of their domestic markets by providing support for the economic integration of urban-rural trade networks, despite initial lack of effective political integration and significant economic dualism (e.g. between northern and southern Germany); by investing in inland transport; by abolishing customs duties and tolls, to stimulate the evolution of national markets; by unifying their countries politically; by strengthening their grips on overseas colonies and by engaging in territory-expanding wars. They also added government-demand for manufactures (e.g. military uniforms in Russia) to inadequate private demand. Governments substituted for missing domestic factors through measures to enlarge the supply of skilled labor and finance. To increase the supply of skilled labor they invested in education, imported skilled technicians (especially in Russia under Catherine the Great) from more advanced countries, and, where necessary, removed restrictions on labor mobility (slavery and serfdom), and passed immigration laws favoring the influx of unskilled labor. Where the country was too poor to finance the banks required to finance industry, the State promoted the establishment of financial intermediaries, invested in industrial enterprises directly, or participated in industrial investment together with private entrepreneurs. Thus, the governments of the follower countries engaged in manifold entrepreneurial activities to catch up with Great Britain's Industrial Revolution, in an effort to reduce its military, economic and political power.

(3) **The Government-Assisted, Open Economy, Balanced Development Process of the Small, High-Social-Capital Countries.** This path was pursued by Belgium, Denmark, The Netherlands, Sweden and Switzerland. The function of governments in economic activity was less in this group than in the latecomers to industrialization but more significant than in the firstcomers to the Industrial Revolution. Governments were critical in the early development of democracy; market institutions; the provision of finance of interregional transport, agricultural infrastructure and human resources; and in avoiding robber-baron capitalism by establishing a relatively extensive regulatory framework for private enterprise. But the governments' provision of finance to the private sector or their direct management of transport systems, were less than in the latecomers. The smallness of their countries led to heavy export-dependence and to stress on productivity improvements in both



agriculture and industry as they shifted from extensive agriculture to intensive farming in high value crops. Also, the paucity of natural resources led to specialization in human-resource intensive industrialization. The results were not only economic growth and development but widely shared improvements in living standards.

**Point B: The End-points of Development have Differed Among OECD Countries** Not only have the historical trajectories of different OECD nations differed during the 19th century, but they also exhibit distinct styles of mature capitalism currently. While Japan, Scandinavia, America, France, Germany and Great Britain all have mature capitalist systems, their specific forms of capitalism are dissimilar (Maddison 1982 and 1991; and Artis and Lee 1994). Each pattern of capitalism is characterized by a special style of interaction between the government and the business sector; by a particular extent of government-ownership of productive enterprises and infrastructure; by a specific relation of government to labor unions; by different methods of government regulation, control and monitoring of the financial system; by distinct structures of their financial systems, business organisations, and labor union; and by disparate degrees of political decentralization. The relations between labor unions and business and labor unions and the polity have also been dissimilar among them. Finally, while they are all democracies, the particular forms of democracy (parliamentary or presidential) and the relative importance of individual pressure groups (business, labor, farmers and bureaucracies) and political parties in policy formation have also varied among them. The dissimilarities in capitalist styles are due both to the different development paths the countries have pursued and to differences in their initial cultures and values. The diversity in end-points therefore not only reinforces non-uniqueness but also indicates path-dependence.

Both the distinct paths of development and the distinct endpoints of development have led to different national outcomes for inequality, the welfare state, and their evolutions over time in OECD nations.

**Point C: Currently Developing Countries have also been following Alternative Paths to Development.**

**One**, the pioneering studies of industrialization, undertaken by Chenery (1960) and Chenery and Syrquin (1975), found systematic differences in the industrialization paths pursued by developing countries. Using country-deviations from the average process, they established that one could distinguish among four different country-strategies: primary-oriented development; import-substitution; balanced growth; and a strategy of industrialization. The contemporary variety in developing-country strategies is not unlike that which was evident during the 19th century, when both current OECD and overseas territories are included.

**Two**, the role of governments in economic development has contrasted significantly among countries. In some East Asian countries, the government has successfully played an entrepreneurial role, in much the same manner as it did in the Late Comers to the Industrial Revolution (Amsden 1989 and Wade 1990). The governments of East Asian countries shaped their financial, investment, trade and commercial policies so as to promote their countries' climbing the ladder of comparative advantage. They restructured institutions to conform to their policy aims, changing old institutions or introducing new ones whenever they embarked on new policy initiatives. And they exhibited high degrees of government-commitment to development and enjoyed high degrees of autonomy from pressures by business or workers. At the beginning of each policy phase, their initiatives were market-incentive distorting, though the extent of market distortions was limited by tying subsidies to the firms' export-performance; and, once industries attained certain levels of proficiency, the government spurred

competitiveness by shifting to market conforming policies and liberalizing trade. By contrast, Latin American governments enjoyed less autonomy, exercised less direction, and had less commitment to the economic development of their countries (McGuire 1997). Their main struggle was over social reform rather than over economic development. Their governments started out as captives of landed feudal elites and the foreign interests to which they were allied (Furtado 1963) and tailored institutions, especially land tenure, to favor landed-elite interests. When urban middle class interests became important, they embarked on import substitution policies, to benefit them, and stayed with these policies till the 1980s.

**Three**, not only government roles but also patterns of accumulation differed among developing countries. While all LDCs stressed accumulation as a *sine qua non* for development, countries have differed sharply in the extent of emphasis they placed upon human as distinct from physical capital accumulation. Some countries, primarily in East Asia, initiated development by stressing the accumulation of human capital prior to embarking upon serious industrialization, with favorable effects on income distribution, growth, industrialization and productivity. Others, especially in Africa, imported the necessary human resources for industrialization and developed indigenous skills only subsequently. This accumulation strategy resulted in a narrow-based, dualistic development path; little, low-productivity industrialization; natural-resource based exports; cyclically varying growth, responding to changes in world demand for raw material inputs; and shallow social change. Still other LDCs, mainly some in Latin America, embarked on the accumulation of physical capital at an early stage in their development, widening inequality and developing an insufficient domestic market for the output of manufactures. They pursued low-productivity industrialization by engaging in import-substitute industrialization, starting with consumer goods and subsequently widening import-substitution to encompass industrial inputs. Thus, the different accumulation patterns pursued by developing countries in the fifties and sixties led to their subsequent achievement of comparative advantage in either labor intensive or capital intensive exports (Balassa 1979), with different consequences for inequality, industrial structure, domestic price levels, competitiveness, and optimal commercial policy. The dependence of current comparative advantage on prior accumulation patterns not only belies the "unique path" hypothesis also indicates path dependence.

**Four**, the sequences of industrialization and trade policies diverged among countries. Some LDCs, primarily in Latin America, pushed into the second phase of import-substitution, in capital-and-skill-intensive producer goods, after completing the first phase of import-substitution, in labor-intensive consumer goods. While they succeeded in promoting significant structural change in their economies, this was at the cost of slow growth, loss of competitiveness, and worsening distributions of income (Krueger 1983). Other LDCs, mainly in East Asia, shifted immediately to export-led growth in labor-intensive consumer goods after a short period of import substitution (Kuo, Ranis and Fei 1981 and Wade 1990). These countries experienced egalitarian growth, increased competitiveness, and rapid economic growth.

**Five**, adjustment patterns to the debt crisis of the 1980s have varied significantly among countries (Balassa 1989). Some developing countries, mostly in Latin America and Africa, adopted restrictive import regimes, deflationary government expenditure and macroeconomic policies, and restraining wage policies, reduced subsidies, and liberalized their domestic markets to reduce their current account deficits, lower inflation, and increase competitiveness. For the countries that followed this path, this was a lost development decade, with substantial increases in poverty, inequality and characterised by low- growth, from which these countries have started to emerge only in the 1990s. By contrast, a few countries, mostly in East Asia but also in Latin America (Brazil and Chile), coped with the adjustment problem by exporting their way out of the crisis. They shifted from import-substitution

to export-promotion, devalued to promote expenditure switching among imports and domestic goods, and raised interest rates to increase net capital inflows. After a short period of curtailed growth rates, these countries rebounded remarkably quickly, and successfully grew their way out of the crisis.

**Six**, interaction patterns among economic, social and political institutions important for economic growth have differed systematically at different levels of socio-economic development. This is apparent from the statistical analysis of sources of intercountry differences in growth rates of per capita GNP between 1950 and 1965, by Mrs Morris and myself (1967). Accordingly, in developing countries at the lowest levels of socio-economic development (Subsaharan Africa and a few severely underdeveloped countries in Latin America and Asia) the primary explanatory variables of intercountry differences in economic growth were intercountry differences in degrees of social development. Next, at a development level characteristic of the more developed but still transitional countries the significant interactions were between economic growth, on the one hand, and investment in infrastructure and the degree of development of economic institutions, particularly financial systems, on the other. Finally, in the socio-economically most developed LDCs, in which the primary social-development barriers had been overcome, the significant interactions explaining intercountry differences in rates of economic growth were between growth rates, on the one hand, and the effectiveness of economic institutions and a cluster of variables indicating the extent of national mobilization for economic development, on the other. This latter cluster combined the extent of leadership commitment to development, the investment rate, the rate of industrialization, and the degrees of technological modernization in both agriculture and industry.

**Seven**, since 1980, paths of development of LDCs have differed systematically not only by initial conditions but also at the same level of socio-economic development (Adelman, 1999). Thus, during 1980-94, some sub-Saharan countries have shifted to a broadly-based rural-development approach while others have continued their earlier trade-led, limited industrialization pattern, of narrowly-based economic growth. In addition, some intermediate social-development-level countries have continued their previous dualistic, export oriented, growth while others have concentrated on developing the institutional bases for subsequent broad-based development, without however achieving much growth during this period of structural change.

### **Proposition Three: Initial Conditions Shape Subsequent Development.**

Evidence:

**One**, Abramowitz (1986) found that initial levels of social capability explained intercountry differences in the trajectories pursued by different European industrializers during the 19th century. Their findings were confirmed for current developing countries by Temple and Johnson (1996). Using the Adelman-Morris index of socio-economic development in 1960 as an indicator of initial levels of social capability, they found that rates of growth in per capita income and in total factor productivity are strongly related to the extent of a country's initial level of social capability. They therefore reject the Solow model, in which technology is the same across countries, in favor of a model in which technology differs and preexisting social factors play a role in the speed of catching up.

**Two**, both economic history and contemporary development suggest that institutional readiness for capitalist economic growth is key to economic development, because it provides the conditions that enable technical progress and export-expansion to induce widespread economic growth (North 1973 and 1990 and Adelman and Morris 1967). Those European countries that had achieved widespread economic growth by the end of the nineteenth century had started with institutions better equipped for technological change than either the European dualistic-growth, later industrializers or than the developing countries of the 1950s (and Kuznets 1958 and Morris and Adelman 1989). They

already had large preindustrial sectors well endowed with trained labor and entrepreneurs; governments that protected private property, enforced private contracts and acted to free domestic commodity and labor markets; and leaderships responsive to capitalist interests that adopted trade, transportation and education policies which fostered technological progress in either industry (the early industrializers) or agriculture (the balanced-growth countries).

Similarly, those developing countries that in the 1950s were institutionally most advanced were the ones that benefitted most from the growth impetus imparted by import demand from the OECD countries during the golden era of economic development. They had an average rate of economic growth 50% higher than that of the average non-oil country at the next-highest, intermediate, level of socio-institutional development (Adelman and Morris 1967). Furthermore, by 1973, the overwhelming majority of institutionally most developed countries in 1950 had become either NICs or developed countries while none of the countries that had lower levels of socio-institutional development had become NICs. Finally, upgrading financial and tax institutions was an important element in explaining intercountry differences in rates of economic growth at all levels of economic development in contemporary developing countries.

**Three**, the extent of initial natural resource abundance mattered to development potential. During the 19th century, some of the land-abundant, white settler overseas territories became subsequently developed. By contrast, all land scarce, densely settled, former overseas European colonies are still underdeveloped today (e.g. India, Egypt and Burma).

**Fourth**, the initial degrees of government political autonomy and the initial distributions of assets determine whose interests the political system represents, and hence the institutions and policies the state adopts (Morris and Adelman 1988). The severely economically dependent colonies, that had no autonomy to set their trade, immigration and investment policies during the 19th century were not able to pursue domestic development, as distinct from export oriented, enclave, cyclical growth. It is not till they were decolonized that they could pursue development, and they are still struggling to develop today. By contrast, some of the less severely dependent Commonwealth countries (Australia, Canada), could set their economic policies to benefit their own industrialization and became OECD countries after WWII.

Along the same vein, during the 19th century, developing countries that had sufficient political autonomy from their colonial rulers to be able to set their own economic policies so as to benefit domestic industrialization were able to translate the growth impulses from export expansion into widespread economic development; by contrast, those countries that were politically and economically so dependent on the center that they had no control over domestic economic policies (India and Burma) achieved only dualistic, enclave, sporadic growth (Morris and Adelman, 1988, ch 6).

#### **Proposition Four: The Development Trajectory of Countries is not only Non-Unique but also Malleable.**

Evidence:

**One**, development is responsive to policy. (This would hardly be worth saying, were it not for the contention of the rational-expectations school). In both developed and developing countries, economic outcomes have been influenced by the goals of economic policy. When, in the 1950-73 period, the OECD countries focused on economic growth, they got it. Similarly, when, after 1973, they focused on economic stabilization, deliberately sacrificing economic growth and employment, they also got it (Maddison 1999). Similarly, when developing countries, in the seventies, chose not to curtail their development momentum but rather to pursue debt-led growth, they succeeded in raising their

growth rates well beyond those of developed countries. (This is not to say that this was a wise choice--only that it worked for a time). When they had to shift to belt-tightening policies, and make debt-repayment their main objective, they succeeded in forcibly reducing their domestic standards of living and curtailing their growth rates. (This is also not to say that this was the best adjustment strategy; only that those governments who chose to pursue it had an effect upon economic outcomes).

**Two**, as discussed to some extent in the previous section, our historical study indicated that institutions and policies that were good for initiating economic growth were generally not appropriate for its continuation. For example, in the land-abundant non-European countries (Morris and Adelman 1988), foreign-dominated political institutions were a powerful force for the market-oriented institutional change that initiated strong primary export expansion. But the institutions that were good for export-growth brought about neither systematic agricultural improvements nor consistently rising standards of living. Ultimately, however, successful development required that domestic economic institutions be transformed so that widely shared growth could ensue and a domestic market for manufactures could emerge.

**Three**, countries that got stuck in a given phase of their institutional structure or their policy orientation could not develop beyond a certain point. In backwards European countries, governments and international resource-flows could initially substitute for the missing institutional requirements of economic growth (Gershenkron 1962). At first, government-demand for domestic manufactures could successfully substitute for deficient home markets; government finance and foreign-capital inflows could substitute for inadequate private domestic savings and underdeveloped financial institutions; and imports of skilled workers and technology could substitute for meager domestic human resources. But after a certain point these substitutions became inadequate. To generate development, economic institutions and policies had to change so as to enable the domestic, private provision of the capital, skills and the broad-based expansion of domestic markets. For example, countries that were unable to selectively shift out the import-substitution phase of their industrialization, continued to have high-cost industry and captive bureaucracies. Similarly, nations that were unable to transform their agricultural institutions from ones suitable to extensive, plantation agriculture, have been unable to progress beyond moderate degrees of relatively slowly growing industrialization and inequitable economic growth.

Therefore, governments have to have certain degrees of autonomy from both domestic and international pressures to enable them to switch out of policies and institutions appropriate to earlier phases of their economic development once they have outlived their primary usefulness. Whether they do or not depends on: whose interests the political system represents; how entrenched, selfish and short-sighted their perspectives are; and what institutions exist for participation by the civil society in policy formulation. The divergence in subsequent trajectories between two countries with very similar initial conditions towards the third quarter of the 19th century, Argentina, whose polity represented the feudal landed elites, and Australia, where urban workers had captured the polity, illustrates this point. So do the present contrasts between countries that could not switch out of import-substitution except under external pressure, such as Colombia and Mexico, on the one hand, and countries that were capable of switching into early export-orientation, such as Brazil, Taiwan and Korea, on the other. Finally, the distinctions between Indonesia and Korea in handling their current financial crises also illustrate the critical importance of sufficient political autonomy to permit governments to undertake substantial institutional restructuring. Indonesia, that is mired in crony-capitalism, has been unable to restructure its commercial and industrial organizations towards greater competitiveness and fairness, while Korea, where the government has sufficient autonomy and credibility, is successfully mounting a forceful program of dismantling and rationalizing the chaebols.

## IV. CONCLUSION

Economic development is a highly multifaceted, non-linear, path dependent, dynamic process involving systematically shifting interaction patterns among different aspects of development and therefore requiring predictably changing policies and institutions over time. By insisting on simplistic theories and on simple growth models that misspecify the process of economic development, the policy prescriptions the profession and the aid agencies deliver to developing-country governments are mostly flawed. For the majority of countries they are likely to be either completely or partially incorrect. The Bank (and Fund) must learn to accept that development is a complex, non-unique, non-linear process that depends on countries' initial conditions and on their economic, institutional, socio-cultural and political histories. The international aid institutions must therefore start delivering a more state-specific, differentiated message to their clients, difficult as it might be. The cookie-cutter approach to policy is likely to be incorrect or irrelevant at least as often as it is right.

### References

- Abramovitz, Moses. 1986. "Catching up, Forging ahead, and Falling Behind" Journal of Economic History 385-406.
- Adelman, Irma. 1958. Theories of Economic Growth and Development (Stanford: Stanford University Press).
- Adelman, Irma. 1999. "Society, Politics and Economic Development, Thirty Years After" in John Adams and Francesco Pigliaru, eds. Economic Growth and Change (Aldrich: Edward Elgar).
- Adelman, Irma, and Cynthia Taft Morris. 1967. Society Politics and Economic Development: A Quantitative Approach (Baltimore: Johns Hopkins University Press).
- Adelman, Irma , and Cynthia Taft Morris. 1989. "Nineteenth-Century Development Experience and Lessons for Today." World Development 17: 1417-1432.
- Adelman, Irma, and Sherman Robinson. 1978. Income Distribution Policy in Developing Countries: A Case study of Korea (Stanford: Stanford University Press).
- Amsden, Alice H. 1989. Asia's Next Giant (New York: Oxford University Press).
- Artis, M.J. and Lee N. 1994 The Economies of the European Union(Oxford: Oxford University Press).
- Balassa, Bela. 1979. " A Stages Approach to Comparative Advantage" in Proceedings of the Fifth World Congress of the International Economic Association I. Adelman ed. 121-156. (London: Macmillan)
- Balassa, Bela. 1989. "Exports, policy choices and economic growth in developing countries after the 1973 oil shock" reprinted in Comparative Advantage, Trade Policy and Economic

Development Balassa ed 323-337.

Baran, Paul A. 1957. The Political Economy of Growth (New York: Modern Reader Paperbacks).

Barro, Robert, 1996 "Democracy and Economic Growth" Journal of Economic Growth 1:1-27.

Bhagwati, Jagdish. 1985. Essays on Development Economics vol 1 (Cambridge: MIT Press).

Black Cyril E. 1966. The Dynamics of Modernization: A Study of Comparative History. (New York: Harper and Row).

Campos, Nauro and Jeffrey Nugent. 1996. "Institutions and Economic Growth in Latin America: An Econometric Study " mimeo.

Chenery, Hollis 1960. "Patterns of Industrial Growth" American Economic Review 50:524-54.

Chenery, Hollis and Moises Syrquin. 1975. Patterns of Development 1950-1970 (London: Oxford University Press)

De Melo, Martha, Cevdet Denizer, and Alan Gelb. 1996. "Patterns of Transition from Plan to Market" World Bank Economic Review 10:397-424.

Emmerij, Louis. 1986. " Alternative Development Strategies based on the Experience of the World Development Program" in The Design of Development Strategies Adelman, Irma and Edward J. Taylor eds. (Rohtak, India: Jan Tinbergen Institute of Development Planning).

Furtado, Celso. 1963. The Economic Growth of Brazil (Berkeley: University of California Press).

Gershenkron, Alexander. 1962. Economic Backwardness in Historical Perspective (Cambridge: Harvard Press).

Hagen, Everett E. 1962. On the Theory of Social Change (Homewood Ill. Dorsey Press).

Harris, John R. and Michael P. Todaro 1970. " Migration, Unemployment and Development: A Two Sector Analysis" American Economic Review 60: 126-142.

Hirschman, Albert. 1958. The Strategy of Economic Development (New Haven: Yale University Press).

Hoselitz, Bernard. 1960. Sociological Aspects of Economic Development (Glencoe, Ill. The Free Press).

Kuznets, Simon 1966. Modern Economic Growth: Rate, Structure, and Spread.(New Haven: Yale University Press.

Kuznets, Simon. 1968. Towards a Theory of Economic Growth with Reflections on the Economic

Growth of Modern Nations (New York: Norton).

Krueger, Anne O. 1979. "The Political Economy of the Rent Seeking Society" American Economic Review 64:291-303.

Krueger, Anne O. 1979. The Developmental Role of the Foreign Sector and Aid (Cambridge: Harvard University Press).

Krueger, Anne O. 1983. Trade and Employment in Developing Countries: Synthesis and Conclusions (Chicago: University of Chicago Press).

Kuo, Shirley, Gustav Ranis and J.H. Fei. 1981 The Taiwan Success Story (Boulder, CO: Westview Press).

Inkeles, Alex and Smith D.H. 1966. Becoming Modern (London: Heinemann)

Landes, David S. 1969. The Unbound Prometheus (Cambridge: Cambridge University Press).

Landes, David S. 1998. The Wealth and Poverty of Nations (New York: W.W. Norton).

Leibenstein, Harvey. 1957. Economic Backwardness and Economic Growth (New York: Wiley).

Lerner, Daniel 1958 The Passing of Traditional Society (Glencoe, Ill. The Free Press).

Lewis, W. Arthur. 1954. "Economic Development with Unlimited Supplies of Labor" Manchester School of Economic and Social Studies, 22: 139-191.

Lucas, Robert E. 1988. "On the Mechanics of Economic Development" Journal of Monetary Economics 22:3-42.

Maddison, Angus. 1982. Phases of Capitalist Development (Oxford: Oxford University Press).

Maddison, Angus. 1991. Dynamic Forces in Capitalist Development (Oxford: Oxford University Press).

Mauro, Paulo. 1995 "Corruption and Growth" Quarterly Journal of Economics 110:681-711.

McClelland, David C. 1961. The Achieving Society (New York: Free Press).

McGuire, James W. 1997. Rethinking Development in East Asia and Latin America (Los Angeles: Pacific Council on International Policy).

Meier, Gerald M. (various Years) Leading Issues in Development Economics (Oxford: Oxford University Press).

Morris, Cynthia Taft, and Irma Adelman. 1988. Comparative Patterns of Economic



- Development:1850-1914 (Baltimore: Johns Hopkins University Press).
- Myrdal, Gunnar. 1968 The Asian Drama (Hammondsworth: Penguin Books)
- Nogues, J. and Gulati, S 1992. Economic Policies and Performance under Alternative Trade Regimes: Latin America during the Eighties (Washington, DC, World Bank).
- Nurkse, Ragnar. 1952. Problems of Capital Formation in Underdeveloped Countries and Patterns of Trade and Development(New York: Oxford Press).
- North, Douglass C. 1973. The Rise of The Western World (Cambridge: Cambridge University Press).
- North, Douglass C. 1990. Institutions, Institutional Change and Economic Performance (New York: Cambridge University Press).
- Polanyi, Karl 1944. The Great Transformation (Boston: Beacon Press).
- Prebisch, Raul. 1950. The Economic Development of Latin America and Its Principal Problems (New York: United Nations, Economic Commission for Latin America).
- Romer, Paul. 1986, "Increasing Returns and long-Run Growth" Journal of Political Economy 94: 27-53.
- Rosenstein-Rodan, Paul N. 1943 "Problems of Industrialization in Eastern and South-Eastern Europe" Economic Journal 53:202-211.
- Rostow, Walt W.(1960) The Stages of Economic Growth: A Non-Communist Manifesto (Cambridge: Cambridge University Press).
- Sen, Amartya 1988. "The Concept of Development" in Handbook of Development Economics Hollis Chenery and T.N. Srinivasan eds.(Amsterdam: North Holland).
- Solow, Robert. 1957. "Technical Change and the Aggregate Production Function" Review of Economics and Statistics 39:312-320.
- Stiglitz, Joseph. 1989."The Economic Role of the State" in The Economic Role of the State A. Hertei ed (London: Basil Blackwell).
- Stiglitz, Joseph. 1998. "More Instruments and Broader Goals: Moving Towards the Post Washington Consensus" (Helsinki: WIDER).
- Stiglitz, Joseph. 1996. "Some Lessons of the East Asian Miracle" World Bank Research Observer 11:151-77.
- Streeten, Paul P. 1986 "Basic Needs: the Lessons" in The Design of Development Strategies Adelman, Irma and Edward J. Taylor eds. (Rohtak, India: Jan Tinbergen Institute of

Development Planning).

Streeten, Paul P. and Frances Stewart. 1976 " New Strategies for Development: Poverty, Income Distribution and Growth"Oxford Economic Papers 28:113-28.

Temple Jonathan and Paul Johnson. 1996. " Social Capability and Economic Development"  
Economics Discussion Paper 114 (Oxford:Nuffield College).

United Nations Development Program (UNDP) (various years) Human Development Report (New York: Oxford University Press.

Wade Robert. 1990. Governing the Market: Economic Theory and the Role of Government in the Industrialization of East Asia (Princeton: Princeton University Press).

Wolfenson, J.D. 1998. "The Other Crisis" Adress to the World Bank/IMF Annual Meetings.

\*\*World Bank. 1996. World Development Report: From Plan to Market (New York: Oxford Press).

\*\*World Bank. 1993. The East Asian Miracle (New York: Oxford Press).

\*\*World Bank. 1997. World Development Report 1997: The State in a Changing World (New York: Oxford Press).

World Bank. 1998. World Development Report 1998/99: Knowledge for Development (New York: Oxford Press).