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YALE UNIVERSITY

P.O. Box 208269  
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CENTER DISCUSSION PAPER NO. 886

## **THE EVOLUTION OF DEVELOPMENT THINKING: THEORY AND POLICY**

**Gustav Ranis**  
Yale University

May 2004

Notes: Center Discussion Papers are preliminary materials circulated to stimulate discussions and critical comments.

This paper was prepared for the World Bank's 2004 Annual Conference on Development Economics. The author would like to thank Tavneet Suri for helpful comments.

This paper can be downloaded without charge from the Social Science Research Network electronic library at: <http://ssrn.com/abstract=551645>

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# **The Evolution of Development Thinking: Theory and Policy**

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## **Abstract**

This paper makes an effort to trace the course of development thinking and associated development policy over the past six decades.

Section I focuses on the early Post-War Consensus, with theory focused on extensions of classical dualism theory and policy concentrating on creating the pre-conditions for development. Section II traces the increasing awareness of the role of prices, a diminishing reliance on the developmentalist state and an increased reliance on structural adjustment lending associated with IFI conditionality. Section III illuminates the search for “silver bullets” which can be identified as key to the achievement of success. Finally, Section IV presents the author’s assessment of where we are now and where we will, or should be, heading in the effort to achieve the third world’s basic development objectives.

**Keywords:** Development Theory, Development Policy

**JEL Codes:** O11, O20

# **The Evolution of Development Thinking: Theory and Policy**

Gustav Ranis

## **I. The Early Post-War Consensus**

In the 1950s and 1960s, the previously neglected sub-field of Development Economics was rediscovered. Available economic models seemed to offer only limited insights into the practical problems facing the so-called Third World. The dominant one-sector macro models of the day, from Keynesian to Harrod-Domar (see Harrod 1939 and Domar 1957) to Solow 1956, seemed to have relatively little relevance for societies not primarily concerned with business cycles or steady state properties. Most contemporary growth models, in other words, were seen as advanced country-related, relatively abstract theoretical constructs, faithful to the dominant assumptions of neoclassical macro-theory: full employment, market clearing and perfect competition, all of which seemed to have little relevance for the segmented commodity, labor and credit markets of the poor countries.

Against this background, the concept of dualism attracted considerable attention. Sociological dualism associated with the name of Boeke 1953 emphasized differences between Western and non-Western objectives and cultures; technological dualism pointed to by Higgins 1956 and Eckaus 1955 focused on the difference between variable factor proportions in traditional and fixed coefficients in modern sectors; a third and increasingly dominant strand focused on the coexistence of sectors basically asymmetrical in behavior and thus dualistic in some key analytical dimensions. The first clear manifestation of this third version of dualism undoubtedly appeared in the *tableau economique* of the physiocrats who emphasized the

importance of an agricultural surplus supporting non-productive activities elsewhere; but it was classical dualism, coinciding more or less with the advent of what was erroneously termed the industrial revolution in Western Europe, which provided the raw materials for the renewed emphasis on dualism in early post-World War II development theory.

It was classical school concepts, owing much to Ricardo 1951, which focused attention on the coexistence of a still overwhelmingly large agricultural sector subject to diminishing returns to labor on basically fixed land, and non-agricultural activities growing as a consequence mainly of the accumulation of fixed capital and labor drawn out of agriculture which were central to the story. While the classical school did not really model the interaction between these two sectors, it is clear that the main fuel for the reallocation of labor and for the accumulation of industrial capital was seen as coming from the profits of agricultural capitalists. It should, of course, be noted that the assumption of the near-fixity of land was combined with Malthusian (see Malthus 1815) population pressures and with the notion of an institutionally determined agricultural real wage, even though, in contrast to the physiocratic view, the laboring class was now free and in a position to bargain with capitalist landlords in setting the level of that wage. As is well known, Ricardian/Malthusian pessimism with respect to the ultimate stagnation of agriculture in the absence of marked technology change was a dominant feature of their analytical work. Whether innovations in industry, reflecting Smith's relative optimism, would be strong enough to provide sufficient industrial profits to rescue the situation remained a controversial issue.

The first modern theorists to build on classical dualism were undoubtedly Rosenstein-Rodan 1943, Mandelbaum 1945 and Nurkse 1953, all of whom, in their own way, pointed to the existence of surplus labor as a potential resource which, once reallocated from agriculture to

higher productivity pursuits in non-agriculture, would constitute a major fuel for development. But it was Arthur Lewis 1954 who, in his famous 1954 article, built on some of the main ingredients of the classical tradition, focusing more precisely on dualism in labor markets (i.e., a competitive wage in non-agriculture tied to a bargaining or institutional wage in agriculture). Lewis, moreover, found himself allied with Smith 1880 in seeing the relatively small non-agricultural commercialized sector as the dynamic partner, expanding and fed by the mobilization of the hidden rural savings which Nurkse and Rosenstein-Rodan had identified. In Lewis's view, the reallocation process would continue until all the surplus agricultural labor (i.e., not necessarily zero marginal product labor but, as emphasized by Fei and Ranis 1961, 1964, all those whose remuneration exceeded their low marginal product) had moved out of agriculture into commercialized non-agriculture, marking a turning point at which time dualism would atrophy and the economy become fully neoclassical.

It is fair to say that the theoretical elements of this early post-war consensus focused on capital scarcity and savings-pushed growth, with relatively minor emphasis on technology change in either sector. Moreover, both Rosenstein-Rodan and Nurkse very much emphasized the need for balanced growth, not only between agriculture and non-agriculture, but also on the need for balance within each sector, so that Say's Law could come into play and shoes and socks would both be produced, feeding each other on both the supply and demand sides. It is also noteworthy that there was a good deal of elasticity pessimism in the air during those years, both with respect to agricultural response mechanisms, as already noted, and with respect to the open economy, i.e. export opportunities. The international trade scene, dominated by Prebisch 1962, Singer 1950 and Myrdal 1957, was painted in colors unfriendly to development. There were, of course, some early critics of various aspects of dualism, on the one hand, and of structuralism, on

the other, represented by adherents to the neo-classical paradigm. To one degree or another they rejected the notion of labor surplus (Schultz 1964) and the non-responsiveness to price signals of various actors (Haberler 1988 and Bauer 1957). But they were clearly voices in the wilderness.

The prevailing theoretical winds indicated that, on the policy side, there was a strong inclination to turn to the interventionist state as a key instrument of development. The motivation for this trend was at least twofold. One was the desire to cut pre-independence colonial ties which were identified with the market mechanism; and second, there was a felt need to create an economy out of what was often still viewed as an agglomeration of agents and resources requiring, first of all, the creation of the so-called “preconditions of development.” At home, the interventionist state accordingly felt the need to create infrastructure, the institutions required to permit the functioning of a national entity, plus the subsidization in various ways of newly created non-agricultural entrepreneurs, complemented, on the international side, by the infamous import substitution syndrome protecting these entrepreneurs. Typically, governments thus tended to over-commit themselves by deploying a vast array of direct and indirect policy instruments to shift resources towards themselves and favored private groups, all in the effort to promote growth. These were usually under the table transfers which tended to manufacture profits for the state or the favored new entrepreneurial class. The motivation was to promote industry, with relatively less attention paid to what was viewed as a stubbornly stagnant agriculture portrayed as a drag on the economy, and with peasants seen as non-responsive to prices and profit opportunities. Generally, industrialization was viewed as equivalent to development, with policy makers in search of a second industrial revolution.

A logical accompaniment of this view of the world were “planning models” focusing on the flow of resources, domestically financed investment supplemented by foreign capital, and

paying relatively little attention to changes in the behavior of the system or the relevance of technology. Such planning models, often based on simple Harrod-Domar foundations, started with exogenous population growth, per capita income targets and focused heavily on how, given certain input-output relations, necessary savings, domestic and foreign, would be sufficient to reach politically required targets. There were, of course, also fancier models, including those of Mahalanobis 1955, modified later by Chenery and associates 1971, all of them relatively silent on price flexibility, exchange rate flexibility and other dimensions of the market mechanism.

It should be noted that, while there was always some recognition of the importance of distributive issues, the predominant view of policy makers at that time was that growth and efficiency should take priority and that issues of equity, like income distribution and poverty alleviation, would be taken care of at a later date. Clearly, high profit and savings rates were viewed as paramount objectives and any premature re-distribution viewed as a trade-off with the objective of growth.

The planning school may be characterized by relative formalism in methodology, usually envisioning a multi-sector production function with multiple inputs and international variables, often exogenously postulated. In this way economic plans could be seen to portray the operation and growth of the economy in a wholistic perspective, with all sectors tending to be viewed as homogeneous and symmetrical. A related trait of the planning school was the systematic application of mathematical models in order to determine the magnitude of all the relevant variables consistently through time. Such “planning for resources” was really based on a belief in the appropriateness of the existing policy rails on which the economy found itself. However, by the 1970’s it had become increasingly clear that the development problem was one of transition from one regime to another during which changes in structure lie at the very heart of

the process, coupled with the realization that 5 year plans can quickly become political albatrosses around the necks of governments, as exogenous shocks inevitably occur. The real focus of planning consequently shifted gradually from a resource focus to devising strategies for policy change to accommodate the changing requirements of transition.

It is undoubtedly correct to say that Solow 1957 and Kuznets 1955 provided the most important transitional mechanisms in the realm of both theory and policy as we move from this post-war consensus into what later became known as the era of the Washington Consensus. Solow's 1957 signal contribution was to emphasize, really for the first time since Schumpeter 1959, the importance of technology in generating growth, spawning a huge literature focused on measuring and quantifying the effects of technology change. This provided a new point of departure for neo-classical growth theory, not only replacing Harrod-Domar with a substitutable production function, but also enthroning exogenous technology change, plus the ensuing effort to whittle down the Solow residual as much as possible. It introduced critical flexibility into the system and spawned a good deal of applied work on the role of R&D, patents and other forms of scientific endeavor, leading at a later stage to the so-called "new growth theory" (see below) which moved to try to endogenize technology change.

It was, however, Kuznets 1971, though mainly concerned with describing modern growth rather than analyzing the transition process in getting there, who provided another essential ingredient focused precisely on the developing world at the end of the post-war consensus era. Kuznets was interested in why some developing countries were successful and others not and placed major emphasis on the sources of structural change over time as between agriculture, industry and services. Chenery and his associates took up the cudgel, using regression analysis in order to depict dimensions of average LDC structural change, first via the use of cross-



sections, and later through increasing resort to time series analysis and pooled regressions. The basic question being addressed was how productivity gains and increments in output are allocated among sectors as income per capita rises and how one explains deviations from average patterns. Kuznets always insisted that such structural changes resulted from the interaction of underlying changes in final demand and capacity conditions, with deviations from any normal pattern largely attributable to differences in the underlying state of nature. He viewed policy as either basically accommodative or obstructive to the play of underlying economic forces and did not view it as an exogenous variable. This is in contrast to Chenery's inclusion of differences in policy among his typological categories.

Over time there was a growing recognition of the potential relevance of flexibility in factor proportions and of the importance of labor-using or capital-saving technology change. Observers began to realize that distortions in relative factor prices, overvalued exchange rates, low interest rates, and biased internal terms of trade, all instruments of import substitution, not only discouraged agriculture, encouraged industrial capital and import intensity and limited the generation of employment, but also created windfall profits for favored elites long after such support was no longer necessary for infant industry reasons. The realization that the enhanced use of the market needed to be complemented by institutional reforms, at least to the extent that small-scale rural development actors could obtain an adequate share of credit, foreign exchange and infrastructural attention, was but one indication of that gradual change in the development paradigm, applied most pronouncedly at first in East Asia.

## **II. The Washington Consensus as Initially Conceived and Subsequently Amended**

It is undoubtedly unfair to attribute the realization that policy change is the key ingredient of successful development to the international financial institutions. I rather would give credit for the realization that prices matter and that macro-economic stability matters to Little, Scitovsky, and Scott 1970, as well as to Bhagwati 1978, Krueger 1978, and Cohen and Ranis 1971, among others, who insisted that a re-structuring of the rails of development was required.

Once easy import substitution of the non-durable consumer goods type had run out of steam, most developing countries increasingly faced a critical choice: continued import substitution, while moving towards more capital and technology intensive output mixes, or export orientation testing competitive international markets. Trade liberalization was generally accepted as an instrument, but its timing was subject to large differences across the developing world. Export promotion often came first, accompanied by a shift from quantitative restrictions to tariffs, subsequently the unification of tariffs, and, gradually, their reduction, even if the timing was very differently implemented. But, performance lagged almost everywhere except in East Asia, which had moved further in rejecting the continued import substitution alternative.

There can be little doubt about the important facilitating role of exports, extending beyond the hand-maiden role emphasized by Kravis 1970, even if one does not accept the notion that exports constitute the principal engine of growth and that export promotion, especially of non-traditional goods, represents the solution in virtually all circumstances. It should be noted that even in small open economies that have been successful, such as Taiwan, initial development success was determined largely at home, via balanced domestic growth and the subsequent export of, first, traditional, i.e., agricultural, goods, before testing the international waters for non-traditional exports. Trade and the associated international movements of

technology and capital have increasingly been seen of potentially great help but still as representing only an assist to the basic domestic development effort. It should again be emphasized that the East Asians encouraged exports long before they opened up their domestic economies to competitive imports in a sustained fashion. One causal chain ran from exports to growth via enhanced competitiveness as well as via the direct impact of imported technology through patents, human capital, and capital goods incorporated in FDI. But another important causal chain also runs from domestic growth generated via R&D back towards the enhanced capacity to take advantage of export opportunities.

One basic ingredient of the new emerging consensus was the need for macro-economic stability, increasingly accepted as a basic necessity by both orthodox and heterodox observers, whether inflation at 20% or 5% is viewed as the tolerable limit. Avoidance of large-scale deficits as a percentage of GDP, along with too rapid monetary expansion, were seen as critical components, with tax reform and the shifting of public expenditure patterns usually part and parcel of the package. With the gradual rejection of structuralism, i.e., the belief in the non-responsiveness of agriculture, and of export pessimism, attention focused instead on an enhanced reliance on liberalizing markets. The original list of Washington Consensus ingredients included other items such as privatization and unified and competitive exchange rates, both still under dispute today, and the simultaneous liberalization of financial markets, both domestic and international, the latter certainly with caveats now attached. What has stood the test of time is the relative openness to FDI and the acceptance of the notion that the gradual deregulation of various control systems is essential for the full mobilization of the private sector.

While not usually listed among the ingredients of the Consensus, the realization that technology choice and the choice of the direction of technology change could be of major

importance for successful development played an increasingly important role (see Stewart 1977 and Evenson and Ranis 1990). The importance of public sector research, especially on export-oriented cash crops, such as sugar, cotton, and coffee, had long been recognized, but its role in basic food crops, in non-traditional agriculture and in non-agricultural exports came only gradually. The Green Revolution, after all, represented an imaginative combination of international and adaptive domestic research (see Griliches 1957 and Evenson and Kislev 1975). It became increasingly clear that food-producing agriculture cannot be neglected, that peasants do respond to their economic environment and that industry cannot pull an economy into modern economic growth if agriculture remains stagnant. It is also interesting to note that R&D in medium and small-scale firms which usually cannot afford to do their own R&D, such as in China's TVEs and Taiwan's small-scale and medium-scale enterprises, had a large pay-off. The productivity of carefully selected public sector research has come to the fore, even as horror stories can be told in reference to the white elephant aspect of many LDC science and technology institutes setting their own agendas not related to the actual needs of the economy. But such stories do not obviate the point that, when increasingly hard budgets become credible, R&D as a public good can have an important role in permitting the continued realization of domestic balanced growth, combined with an export drive powered by dynamic comparative advantage.

Most R&D, of course, takes place in the private sector. One needs only point to the substantial discrepancy among developing countries in terms of levels of total factor productivity or, as some observers seem to prefer, the differential efficiency of investment allocation, to be convinced that an increased emphasis on indigenous applied science and technology is bound to pay off. Tax codes can be modified to encourage greater risk-taking and increased flexibility in the legal implementation dimensions of intellectual property rights can be paid attention to as the

country begins to move up the development ladder. Some countries choose to resort to a different kind of patent, the utility model, with a shorter period of protection and a lower threshold for discovery, one way of encouraging the potentially important, if not spectacular, adaptive or blue-collar type of technological change. This clearly also relates directly to the new growth theory literature (see below).

Privatization was part of the macro package generally accepted in the 80's, partly because of the enhanced efficiency it promised and partly because of the fiscal boost it provided, at least in the short run. On the other hand, critics of privatization have been able to point to the accompanying corruption in some of the transition countries of Eastern Europe as well as the all too frequent exchange of private for public monopoly power. (See Fischer, Sahay and Vegh 1996 and Stiglitz 1991).

It is fair to say that, while there was consensus about the necessary basic macro-economic ingredients of the package to ensure economic restructuring, there was also, from the beginning, a considerable difference of views concerning what constituted needed additional changes at the micro level, clearly much more differentiated by country. These included enhanced labor market flexibility, legal, financial and other institutional reforms. Nevertheless, it is a fact that both bilateral agencies, especially USAID, which termed its 1960's instrument program lending, and subsequently the World Bank and the IMF, which termed similar instruments structural adjustment lending, combined policy packages incorporating both macro and a variety of micro ingredients with fast disbursing loans. This device has become the subject of lively debate, ranging from the cost effectiveness of the resources spent in support of country policy reforms all the way to the implications of extensive conditionality lists infringing on recipients' sensitive internal affairs.

Undoubtedly today the bloom is off the rose of structural adjustment or program lending. Given the mixed record of aid conditionality cum reform packages compiled by the World Bank's own internal evaluation unit (see also Easterly 2001), the argument currently being made is that the time may now be ripe to abandon the instrument altogether and either return to project lending, including those big bad dams, or move to the PRSPs currently being fashioned for the poorest LDCs. In theory, policy-based lending can help countries achieve any objective, even if one has to admit that in the case of a multi-cook operation it is extremely difficult to precisely judge the contribution of such packages. The counter-factual is typically unknowable. But before disenchantment takes over completely we should recall that there are historical AID cases, such as Pakistan and Taiwan in the 1960s, and a number of World Bank cases, including Chile, Ghana and Poland in the 70s and 80s, where such packages worked well.

I would argue, therefore, that, before the policy-based loan instrument is abandoned, it is preferable to see if enhanced decentralization by the World Bank, coupled with an effort to achieve real ownership by recipients, can still rescue it. In my view, the structural adjustment loans of the past and the closely related PRSPs of today continue to be negatively affected by the rush to judgment on both sides, in the attempt to put together a package that can be signed off on so that the money can flow. IFI staff and loan recipients are similarly motivated, the former seeing their rewards and promotions in terms of the volume of commitments made, the latter in terms of the relief expected from fast-disbursing loans. All the rhetoric about the importance of quality and ownership still doesn't have much bite, with both parties not really as concerned as they should be that the reform package is more than superficially a part of the body politic of the recipient.

The IFIs, in other words, all too often don't act like banks and the borrowers all too often have a strong incentive simply to go through the motions in order to obtain quick relief. With the desire to lend still overwhelmingly strong and the attached list of conditions too long and insufficiently differentiated, it is no overstatement to comment that both parties have reached a level of reform fatigue which clearly needs to be addressed. In the wake of the debt crisis of the 80s this problem became particularly acute. Just as it is impossible for U.S. bilateral aid to Egypt, for example, to secure both the support of the so-called peace process with Israel and improved economic performance, it is difficult to use one instrument to achieve both balance of payments crisis support and improved long term economic performance. There is no doubt that the disenchantment with the structural adjustment experience of the 80s and 90s and the nascent disenchantment with the PRSPs on virtually the same grounds has led to a reassessment not only of development thinking but also of development policy. With old certainties under pressure the oscillating search for some "silver bullet" continues.

### **III. The Oscillating Search for a "Silver Bullet"**

With policy-based loans and conditionality under attack, development thought has been entering an era of some disarray, with a substantial number of competitive concepts in play. Some of these focus on the search for a more appropriate objective of development, others on a reassessment of how to get there. Turning once again first to theory, viewing per capita income growth as "the" key objective has actually been under question for some time, see for example, Srinivasan 1994, Streeten 1994, Sen 1992 and Sugden 1993. In fact, as early as the 50s and 60s, both India and Sri Lanka focused on poverty and employment in their 5-year plans. In the 70s a "basic needs" approach, zeroing in on the direct provision of essential commodities, and thus

shirt-circuiting income, made an appearance but was short-lived, partly because it never fashioned firm theoretical links to what else we know about development, partly because it was never really accepted abroad where it was seen as a device for explaining away lower aid levels. But serious mainstream attention to the distribution of income, to the extent to which private income poverty is being reduced, and, more recently, to the extent to which public income poverty, i.e., the distribution of public goods, is being addressed, came later, in the late 70s. During the 90s, the achievement of improvements in various dimensions of human development, i.e., infant mortality, life expectancy, literacy, etc. has come to the fore as the appropriate fundamental objective of development. All this, of course, does not mean that income has been dethroned, only that it is now seen increasingly as an essential means to societal ends rather than as an end in itself.

But the concern with distribution has had a long and useful life, ever since Kuznets in the 1950s worried about the possibility that income growth might have to be bought at the cost of an initially worsening distribution, i.e. the basic efficiency-equity trade-off (see Okun 1975). Aside from the large theoretical literature on inequality and growth in developing countries (such as Banerjee and Newman 1993, and Aghion and Bolton 1997), there has been a continuing lively debate ever since on whether or not travel along the so-called inverse U-shaped Kuznets curve was inevitable or avoidable. Mc Namara initially moved the World Bank in the direction of discussing distributional issues. While Dudley Seers talked about “dethroning the GNP”, what followed was “Redistribution With Growth” (Chenery and others 1974), a collaboration between Sussex and the World Bank, and a string of research projects, including “Growth with Equity” (Fei, Ranis and Kuo 1979), financed by the World Bank.



Current assessments are that, while most countries seem to experience some deterioration in income distribution during rapid growth, this is by no means a necessity and there are quite a few counter-examples, even outside of the well-known East Asian cases. (For example, see Fields 2001, Bourguignon and da Silva 2003, Deninger and Squire 1997, and Ravallion and Chen 1999). Certainly we have gotten away from using pooled cross-sections of historical data and are focusing more on country cases over time which yield a variety of patterns. Fei, Ranis and Kuo 1997 illustrate the case of Taiwan with rapid growth associated with improving distribution. (Also see Persson and Tabellini 1994).

More controversial is the relationship between growth and income poverty alleviation. It seems quite clear from the evidence that per capita income growth is a necessary but not sufficient condition for poverty reduction (see Ravallion and Datt 1999, and Lipton and Ravallion 1995), the necessary rate of growth depending on its character. For example, with respect to the production of primary commodities, what matters is whether they are generated by small farmers on fairly equally distributed plots of land or on large land intensive plantations (see Deninger 1999). In non-agriculture, much depends on technology and output mix choices yielding more or less labor-intensive outcomes (see Evenson and Ranis 1990).

Among theoretical revisionisms has been the recent effort to revive import substitution models, supported initially by the “new trade theory” ideas of Paul Krugman 1994 and, even more recently, the challenge to openness spearheaded by Stiglitz 2002 and Rodrik 1996, 1999, encouraging a revival of populism in the South. Krugman emphasized the role of economies of scale and externalities in trade which was--in spite of his insistence that the concept was to be applied mainly to trade among rich countries--eagerly taken up by some adherents of a return to the “picking winners for the long run” view. Yet more influential and popular have been the

recent attacks on globalization by Stiglitz and Rodrik in which they question the firmly held position among Washington Consensus adherents that increased openness correlates positively with higher rates of growth. I acknowledge that infant industry protection has been deployed by every developing country in the post World War II era, as well as by currently developed countries during their earlier economic history. Contrary to members of the Chicago School, I believe that such interventionism is necessary in the early stage of a country's development; but it is also clear to me that the regime must be strictly time constrained, providing assurance of a more or less reliable trend in the direction of a gradual reduction of the large interventionist policy paraphernalia.

Stiglitz and Rodrik, along with Wade 1990, Lall 1992 and Amsden 1989, assign the favorable results achieved by Korea and Taiwan, among others, to that large array of government interventions generating hot-house conditions for a new and relatively inexperienced entrepreneurial class; but they fail to pay adequate attention to the seemingly inevitable hardening of protectionist arteries if the signals for a gradual but persistent lowering of these hot-house temperatures are not made transparent and credible. Developed countries are sometimes accused of "kicking the ladder" which brought them developmental success in the past. My reading is that, while this may be true, the more successful cases used a ladder that did not consist of continued and increasingly expensive secondary import substitution policies but was consistent with the expectations of a liberalization trend that enhanced competitiveness domestically as well as internationally over time.

More recently, the emphasis on human development, building on the work of Amartya Sen 1985, Mahbub ul Haq 1992 and the Human Development Reports of the UNDP, have attracted a good deal of theoretical attention, including, in particular, the two-way relationship

between growth as the necessary engine and human development as the bottom line objective. The relationship between growth and improvements in infant mortality, life expectancy or literacy—preferable to any necessarily arbitrary index—represents a still somewhat underdeveloped set of production functions (see Behrman 1996 and Birdsall 1985). The feedback from increments in human development back to growth comes closer to being captured by the conventional macro-economic production function as amended over time, i.e. including both conventional Solow-based and unconventional “new growth theory”-related approaches.

This two-way relationship has been studied carefully by Ranis, Stewart and Ramirez 2000 and in more recent work (Boozer, Ranis, Stewart and Suri 2004). We find convincing evidence across all developing countries over time to the effect that, in order to reach a virtuous cycle of sustained growth, accompanied by continuous improvements in human development, priority attention must be given to the latter. It is difficult, if not impossible, to reach the “promised land” of mutual reinforcement between growth and human development from an asymmetric position favoring growth as a temporal priority.

In the 1980s a new branch of growth theory came into vogue which, based on some well-accepted earlier notions in the literature, (e.g. Arrow 1962), tried to endogenize technology change through credible models of market externalities to explain some stylized facts in both developing and mature economies. This literature, pioneered by Romer 1990, Lucas 1988, Grossman and Helpman 1991, and, more recently, Aghion and Howitt 1998, shares the Solowian view of technology change as the driving force of output growth, but, while emphasizing constant or even diminishing returns of scale at the individual firm level, sees increasing returns of scale, i.e. externalities, at the economy level. Grossman and Helpman analyzed the open economy implications of such endogenous growth theory models, and focused largely on R&D

which actually serves two functions, i.e. accelerating the introduction of new capital goods and providing spill-overs by reducing the cost of manufactured goods. While LDCs undertake relatively little R&D, at least of the formal or white-collar variety, the transition to economic maturity in the developing world requires an ever-increasing competence to adopt and adapt new technologies (See Pack and Westphal 1986).

On the policy front, guided by the somewhat uncertain search for theoretical advances, we continue to worry about the relative importance of market failure and government failure, while moving from “market friendly” government interventions to focusing increased attention on the institutions needed to repair both inadequate government infrastructure and improve the functioning of markets. Perhaps the most important change in development thinking in recent years has been a renewed emphasis on the importance of such institutions, ranging all the way from property rights to civil service reform to the financial system, the priorities depending on the pre-existing state of play, i.e. the initial conditions emphasized by Kuznets and others many years ago.

Much current thinking and modeling focuses on the reduction of transactions costs as a result of relevant investments, following the path outlined by North 1990, 1991, Williamson 1975, and others. This renewed emphasis on institutional economics also has relevance for the argument between “big bang” and gradualism approaches attending any developing country reform package. If, for example, institutional changes affecting domestic financial markets have to be put in place before a system can proceed to open itself up to international capital movements, especially of the short-term portfolio variety, both the timing and the sequencing of reforms are clearly materially affected. Early efforts in the transition countries of Eastern Europe to do virtually everything at once, while neglecting the institutional dimensions, have, in

fact, led to the conclusion that this is a riskier choice than the gradualism exhibited in East Asia, including Mainland China. A prominent contrast is the way privatization was organized in many other parts of the developing world as well as in the transition countries of Eastern Europe, i.e. in the absence of adequate provision for regulatory institutions to ensure a workably competitive, post-privatization private sector, as well as the reduction of corruption in the very process of transferring public goods into favored private hands.

More recently, in fact, mostly in the last decade, there has been a strong emphasis among development economists, both amongst academicians as well as on the policy scene, on the micro foundations of development issues. Development economists and policy makers have become more concerned with micro level decisions, realizing their role in the growth of an economy. For example, the role of women in household decision-making, and the effects of the proportion of household resources controlled by women, on the health and nutrition of their children has been empirically documented in a number of micro studies (e.g. Behrman and Wolfe 1987 and Hoddinot and Haddad 1991).

The role of microeconomics in understanding poorly functioning markets has also come to the forefront of development economics research. The importance of poorly functioning land, labor and credit markets is being studied extensively. And the role of informal networks and institutions in dealing with such market failure is now the focus of much research, relating directly to the more macroeconomic literature not only on the role of but also on the formation of relevant institutions.

A seminal paper in this area was Townsend 1994 who looked at whether households in India are able to pool risk across space in the presence of poorly functioning capital markets. He directly tested the general equilibrium implications of such a consumption-smoothing model

using household level data for India and found that households do indeed pool risk across space. What is fascinating about this paper (and subsequent work) on consumption smoothing is that it is not all that different from the income pooling ideas behind models of dualism that were at the forefront of development economics research a few decades ago. This literature has also subsequently fueled a large microeconomic literature in development economics on credit institutions and their efficiency (see Rosenzweig and Wolpin 1993, Udry 1994, Deaton and Paxson 1994).

There are also various micro-economic studies on the impacts of differential labor and land markets on bottom line outcomes. The interlinkage of contracts and the two-tiered nature of labor markets in developing economies and their efficiency has been studied extensively (see Eswaran and Kotwal 1985, Mukherjee and Ray 1995, Foster and Rosenzweig 1996, Rosenzweig 1988). Again, this literature is closely tied to the earlier models of surplus labor and dualism. The aim of this literature has been to understand the implications of market failures, on what institutions may arise at a micro level to cope with such failures and on how best to structure policy to make allowance for these institutions (for example, see Greif 1993).

Finally, we have recently seen a large increase in the active role played by micro-credit organizations and NGO's in developing countries, in almost every possible policy sphere, ranging from not just credit (such as the Grameen Bank and BRAC in Bangladesh), health (ICS in Kenya) and education, but to even intellectual property rights and codes of conduct. Not only do such NGO's have macro-economic impacts, but their micro-economic impacts are also being evaluated. A very active future area of development economics promises to evaluate the impacts of NGO policies and social policy programs. For example, Pitt and Khandker 1998, and Morduch 1999 analyze the Grameen Bank program in Bangladesh; Kremer and Miguel 2001

look at the impacts of de-worming health programs in Kenya; and Skoufias 2001, Schultz 2001 look at the impact of the Progresa schooling initiative in Mexico.

#### **IV. Best Guesses as to the Way Forward**

In this concluding section, I intend to unabashedly ride several hobby horses, hopefully going in the same general direction, with respect to where development thinking and policy are, or at least should be, heading.

First, on the methodology or theory front, I think we will be moving away from large n Barro-type (see Barro 1991, 1997) cross-sections, which have included more and more variables, including geography and religion, accompanied by diminishing robustness, and towards a set of small n comparative historical studies encompassing typologically “neighboring” countries.

Second, we need to pursue much more carefully the aforementioned two-way relationship between growth and improvements in human development, especially with respect to the preferred sequencing, if sustained long-term improvement in both dimensions is to be attained.

Third, I believe we will need to take a much closer look at the pros and cons of decentralization and its relation to democratization and decision-making by the broader body politic. Such analysis of decentralization should clearly not only be of the customary vertical type, i.e., focusing on local government and its fiscal and other functions, moving from deconcentration and delegation to the still rare case of devolution, but also horizontal decentralization, moving from the domination by the executive branch of government, especially the ministry of finance, to the legislative and the judiciary, representative of the critical rule of law dimension of democratic governance.

There can be little doubt that greater local control over fiscal resources is bound to lead to larger expenditure on the social sectors as well as on small-scale infrastructure. It is also likely to lead, given the benefit principle of taxation, to larger total resources being available for all purposes, while the promotion of national standards and the support of equity objectives across regions will continue to require central government action. Central resource transfers for health, education and infrastructure in lieu of actual fiscal devolution have, none-the-less, significantly enhanced both growth and human development indicators whenever we have observed at least delegation in both unitary and federal government systems (see, for example, Ranis and Stewart 1994 for the case of Indonesia and Habibi and others for the case of Argentina).

Fourth, I view plentiful natural resources and relatively easy access to foreign capital as extensions of the Dutch Disease problem, more serious than its narrower exchange rate implications, since they focus on decision-making with respect to reforms that may be needed but can be avoided. Not being “up against it” represents a prescription for not making the necessary political effort to overcome vested interests. I have observed a marked contrast between the more or less linear trend toward the depolitization of policy making in countries with relatively poor natural resource endowments and a consistently more oscillatory pattern of policy evolution in countries with good natural resources, including much of Latin America, Nigeria, and Indonesia. Policy making in such resource rich countries illustrates a tendency towards excessive activism during good times, followed by attempts to artificially maintain growth by government action when times are relatively bad. Moreover, there exists substantial evidence that an important indicator of the differential quality of policy response to the inevitable exogenous shock resides in the manner in which growth is financed. The critical distinguishing



characteristic is not just the size of the tax effort, in other words, relative to the GDP, but also the relative reliance on covert vs. overt means of transferring resources.

The typical natural resource rich country case demonstrates that liberalization efforts initiated at the beginning of an upturn cannot be sustained once the improvement in the external environment encourages the government to expand expenditures additionally through money creation and budget deficits, inevitably leading to inflationary pressures and balance of payments crises down the road. The basic point here is that policy evolution over time, while not completely endogenous, is intimately linked to an economic system's initial conditions, a point well supported by the empirical record of contrasting countries in Latin America and East Asia and the intermediate cases of Southeast Asia (see Ranis and Mahmood 1992). As a long-time observer of Indonesia, for example, I noted that whenever the price of oil was high Pertamina was favored by policy makers, culminating in policies unfavorable to growth or equity, while, when the price of oil was relatively low, Bappenas' advice was accepted and reforms had a much better chance of being pursued and implemented.

Initial conditions, in other words, not only affect income levels but policy responsiveness and flexibility over time, i.e., the extent to which policies can be seen as accommodating or obstructing the gradual changes which all societies must undergo if they are to have a successful transition into modern growth. It is not only the relative strength or weakness of a system's natural resource endowment but also the strength or weakness of that system's ability to attract long-term foreign capital "for the asking" which is relevant here. The common culprit is the large rents emanating from the primary export sector and/or foreign capital inflows and the resulting animated struggle for these rents among various interest groups. Foreign capital flows, especially those not of the direct investment type, are often strongly correlated with the size of

natural resource bonanzas and thus reinforce oscillations rather than acting in a counter-cyclical fashion. My basic argument is that once the relationship between initial conditions and policy responses can be made more transparent the chances for a better understanding and support of the entire development process are enhanced. After all, liberalization in monetary, fiscal and foreign exchange policies over time is not a function of religious belief but required by the need to maintain dynamic efficiency in an increasingly interdependent global economy.

What we can do about natural resource bonanzas is recognize their impact, *a la* Norway and Botswana, and try to neutralize them by prudential fiscal and monetary means. What we can do about foreign capital inflows, especially of the public variety, is insist on much greater passivity by donors, accompanied by real ownership of reform programs on the part of recipients. In spite of protestations to the contrary, the IFIs today still dominate the composition of reform programs and still try to assert their own views and impose some level of conditionality to get them accepted by recipients. Can the recipient really be allowed to take the initiative, with the international donor community willing to respond? Realistically, this would also mean accepting a generally lower level of lending of the “business as usual” type. Passivity on the part of the IFIs and enhanced initiative by the developing countries does not, of course, mean that the international community would sign on the dotted line; but if the credibility of MDB policy-based lending is to be restored, current cynicism about the annual ritual dance, i.e. demanding conditionality and promising aid flows early in the year and then being driven to disburse later on regardless of what has been delivered, has to be overcome.

The new millennium seems to me a propitious moment to reexamine the way our foreign aid business is done. I do not believe, for example, that the PRSP process focused on the poorest countries is sufficiently recipient-driven, given the fact that it still requires extensive IMF and

World Bank tutelage *ex ante*; in fact, the IMF has prepared a voluminous book of instructions outlining just how a PRSP is to be prepared (see Ranis and Stewart 2001). Nor do I believe that the new window of the U.S. Millennium Challenge Account, intended to reward countries that have already done well, is going to be very helpful to those who most need help. Developing countries have to be able to enter into an adjustment dialogue with an increased sense of initiative, involvement and ownership, complete with “self-conditionality.” And public capital inflows must be commensurate in volume, and especially in time, with the exposure to risk and the threat from veto players in the course of reform.

Fifth, the current trend towards gradual liberalization, of course, implies an increasing substitution of indirect for direct controls and a reduction of such controls generally, as we have seen in the case of foreign trade. With respect to the macro policy picture, the general conclusion from experience is that the state’s ability to print money and the compulsory purchase of foreign exchange are more damaging than the temporary retention of high import duties during the development process. The acceptance of a monetary philosophy according to which money supply and foreign exchange reserves are increasingly regarded as mediums of exchange instead of as purchasing power which can be artificially manipulated to achieve socially desirable goals is something gradually being accepted. At the same time, generally low tax/GDP ratios can be enhanced in tandem with fiscal reforms, moving the system from indirect border taxes to indirect domestic taxes en route, ultimately, to domestic taxes which are more income elastic and less regressive.

With respect to the related question of the most appropriate exchange rate policy, this is apparently one of those areas on which it is especially difficult to pontificate as one assesses the experience of the past and attempts to look into the future. There seems to be a clear bias

towards floating rates, with more or less dirty interventions as a realistic companion. This stance avoids the need to accumulate large foreign exchange reserves in defense of the peg and gives a larger role to market determination. This in essence is similar to monetary decontrol moving the system in the direction of an equilibrium interest rate.

Sixth, on the hoary question of the role of the state relative to the role of markets, the above discussion indicates that policy interventions should be focused more on institutional construction and certainly should not follow Amsden's 1989 advice to move purposely against price signals. In short, I find the Acemoglu, Johnson and Robinson 2002 rejection of geography in favor of institutions, by reference to the reversal of fortunes in different parts of the pre and post-colonial world, utterly convincing. Secondly, interventions on behalf of a particular industry or even individual firms should undoubtedly be minimized even as selective state intervention to correct market failure undoubtedly played a role in both the historical Japanese and post-war East Asian "miracle" cases. The 1997 WDR recognized the importance of the state as part of the "new institutional economics." But favorite episodes of where directed credit policies went right, as in the Pohang steel company in South Korea or the automobile industry in Brazil, are still likely to be swamped by the admittedly large herd of industrial white elephants trampling small folks and potential newcomers in all parts of the developing world.

The point is sometimes made, by Rodrik and others, that Latin America, following Washington Consensus prescriptions, has done poorly, while interventionist East Asia has done well. This conclusion is challengeable on several counts. First of all, as we have already noted, natural resource rich Latin America has been famous for a continuous stop/go pattern as between enhanced liberalization and increased interventionism, probably yielding the worst of both worlds, private and public, on average. Secondly, the secular trend towards the reduction of

political power in various markets has been much clearer in East Asia, even if, on average, tariffs, for example, might have been higher. Gradualism in East Asia seems to have done better than shock therapy in Eastern Europe. What also matters, I believe, in comparing development experiences over the last thirty to forty years, is the relative extent of isolation or cohabitation between industry and a meritocratic public service, the basic competence of a bureaucracy capable of pragmatic course reversal, as well as the extent to which the government is concerned about ensuring workably competitive conditions in the private sector.

The current emphasis on organizational and institutional change decidedly does not imply a diminished role for government or some sort of laissez faire prescription, but a different and undoubtedly more effective role for policy-makers. Gradual, but persistent depoliticalization in the monetary, fiscal and foreign exchange arenas requires sensitivity to differing local conditions and the willingness and ability to stay the course.

Last, on the international scene, current negotiations on trade, intellectual property rights and other issues, both multilateral (e.g., WTO related) and regional, are under intense scrutiny. To examine each of these in detail in terms of current thinking and policy would take us too far afield; but it seems clear that overloading the WTO circuit with issues such as labor and environmental standards, just because it is the only organization with some teeth, will only result in immobilizing the organization. A clear and present danger to trade emanates from the mounting “spaghetti bowl” of Free Trade Agreements as well as the current escalating debate on out-sourcing. On the latter, I would enter a plea for urgent international action providing for vastly improved national adjustment assistance programs, possibly financed out of foreign aid budgets, which would establish consistent rules for countries facing the inevitable adjustment costs accompanying trade liberalization. Adjustment assistance, of course, has been tried before

in many countries, but in very few cases has it really focused not so much on extending unemployment insurance to those affected by job losses as on ensuring the portability of benefits and encouraging emerging new industries, including non-traded and export sectors, to hire displaced workers with the help of temporary subsidies. The mutual benefits of freer trade are indisputable, but if “trade not aid” is to become more than a catchy slogan, we urgently need to imaginatively address the political fall-out from displaced workers.

## References

- Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2002. "Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income Distribution." *Quarterly Journal of Economics* 47(4): 1231-1294.
- Aghion, Philippe, and Patrick Bolton. 1997. "A Trickle Down Theory of Growth and Development." *Review of Economic Studies* 64(2): 151-172.
- Aghion, Philippe, and Peter Howitt. 1998. *Endogenous Growth Theory*. Cambridge, MA: MIT Press.
- Amsden, A. 1989. *Asia's Next Giant: South Korea and Late Industrialization*. New York: Oxford University Press.
- Arrow, Kenneth. 1962. "The Economic Implications of Learning-by-Doing." *Review of Economic Studies*, 29(3): 155-173.
- Banerjee, Abhijit, and Andrew Newman. 1993. "Occupational Choice and the Process of Development." *Journal of Political Economy* 101(2): 274-298.
- Barro, Robert J. 1991. "Economic Growth in a Cross Section of Countries." *Quarterly Journal of Economics* 106(2): 407-443.
- Barro, Robert. 1997. *Determinants of Economic Growth: A Cross-Country Empirical Study*. Lionel Robbins Lectures. Cambridge, MA: MIT Press.
- Bauer, Peter T. 1957. *Economic Analysis and Policy in Underdeveloped Countries*. Westport, CT: Greenwood Press Reprint.
- Behrman, Jere R. 1996. "The Impact of Distributive Policies, Governmental Expenditure Patterns and Decentralization on Human Resources." Philadelphia, PA: University of

- Pennsylvania, Background Paper for United Nations Development Project (UNDP), *Human Resources Development Report, 1996*.
- Behrman, Jere, and Barbara L. Wolfe. 1987. "How Does Mother's Schooling Affect the Family's Health, Nutrition, Medical Care Usage and Household?" *Journal of Econometrics* 36(1-2): 185-204.
- Birdsall, Nancy. 1985. "Public Inputs and Child Schooling in Brazil." *Journal of Development Economics* 18(1): 67-86.
- Bhagwati, Jagdish. 1978. *Foreign Trade Regimes and Economic Development: Anatomy and Consequences of Exchange Control Regimes*. Cambridge, MA: Ballinger.
- Boeke, J.H. 1953. *Economics and Economic Policy of Dual Societies*. Institute of Pacific Relations: New York.
- Boozer, Michael, Gustav Ranis, Frances Stewart, and Tavneet Suri. 2004. "Paths to Success: The Relationship Between Human Development and Economic Growth." Economic Growth Center Working Paper No. 874. Yale University, New Haven, CT.
- Bourguignon, Francois, and Luiz Pereira da Silva. 2003. *The Impact of Economic Policies on Poverty and Income Distribution: Evaluation Techniques and Tools*. The World Bank and Oxford University Press.
- Chenery, Hollis B. 1971. *Studies in Development Planning*. Harvard University Press.
- Chenery, Hollis, Montek S. Ahluwalia, C. L. G. Bell, John H. Duloy, and Richard Jolly. 1974. *Redistribution With Growth: Policies to Improve Income Distribution in Developing Countries in the Context of Economic Growth*. New York: Oxford University Press



- Cohen, Benjamin, and Gustav Ranis. 1971. "Import Liberalization and Growth: The Second Post- War Restructuring." In Gustav Ranis, ed., *Government and Economic Development*. New Haven, CT: Yale University.
- Deaton, Angus, and Christina Paxson. 1994. "Intertemporal Choice and Inequality." *Journal of Political Economy* 102(3): 437–67.
- Deninger, Klaus. 1999. "Making Negotiated Land Reform Work: Initial Evidence from Colombia, Brazil and South Africa." *World Development* 27(4): 651-672.
- Deninger, Klaus, and Lyn Squire. 1997. "Economic Growth and Income Inequality: Reexamining the Links." *Finance and Development* 34(1): 38-41.
- Domar, Evsey. 1957. *Essays in the Theory of Economic Growth*. Oxford University Press.
- Easterly, William. 2001. *The Elusive Quest for Growth: Economists' Adventures and Misadventures in the Tropics*. Cambridge, MA: MIT Press.
- Eckaus, R. S. 1955. "The Factor Proportions Problem in Underdeveloped Countries." *American Economic Review* 45(4): 539-565.
- Eswaran, Mukesh, and Ashok Kotwal. 1985. "A Theory of Two-Tiered Labor Markets in Agrarian Economies." *American Economic Review* 75(1): 162-177.
- Evenson, Robert E., and Y. Kislev. 1975. *Agricultural Research and Productivity*. New Haven, CT: Yale University Press.
- Evenson, Robert E., and Gustav Ranis. 1990. *Science and Technology: Lessons for Development Policy*. Boulder, CO: Westview.
- Fei, John C. H., and Gustav Ranis. 1964. *Development of the Labor Surplus Economy: Theory and Policy*. Homewood, Illinois: Richard A. Irwin, Inc.

- Fei, John C. H., and Gustav Ranis. 1961. "A Theory of Economic Development." *American Economic Review* 51(4): 533–565.
- Fei, John C. H., Gustav Ranis and S. W. Y. Kuo. 1979. *Growth With Equity: The Taiwan Case*. New York: Oxford University Press.
- Fields, Gary S. 2001. *Distribution and Development: A New Look at the Developing World*. Russell Sage Foundation and MIT Press.
- Fischer, Stanley, Ratna Sahay, and Carlos A. Vegh. 1996. "Stabilization and Growth in Transition Economies: The Early Experience." *Journal of Economic Perspectives* 10(2): 45–66.
- Foster, Andrew, and Mark Rosenzweig. 1996. "Comparative Advantage, Information and the Allocation of Workers to tasks: Evidence from an Agricultural Labor Market." *Review of Economic Studies* 63(3): 347-374.
- Griliches, Zvi. 1957. "Hybrid Corn: An Exploration in the Economics of Technical Change." *Econometrica* 25(4): 501-522.
- Grossman, Gene M., and Elhanan Helpman. 1991. *Innovation and Growth in the Global Economy*. MIT Press.
- Greif, Avner. 1993. "Contract Enforceability and Economic Institutions in Early Trade: The Maghribi Traders' Coalition." *American Economic Review* 83(3): 525-548.
- Haberler, Gottfried. 1988. *International Trade and Economic Development*. San Francisco: International Center for Economic Growth.
- Habibi, Nadir, Cindy Huang, Diego Miranda, Victoria Murillo, Gustav Ranis, Mainak Sarkar and Frances Stewart. 2003. "Decentralization and Human Development in Argentina." *Journal of Human Development* 4(1): 73-101.

- Harrod, Roy F. 1939. "An Essay in Dynamic Theory." *Economic Journal* 49(193): 14-33.
- Higgins, B. 1956. "The 'Dualistic Theory' of Underdeveloped Areas." *Economic Development and Cultural Change* 4(2): 99-115.
- Hoddinott, John, and Lawrence Haddad. 1991. "Household Expenditures, Child Anthropometric Status and the Intrahousehold Division of Income: Evidence from the Cote d'Ivoire," Research Program in Development Studies, Woodrow Wilson School, Discussion paper 155.
- Kravis, Irving. 1970. "Trade as a Handmaiden of Growth: Similarities Between the Nineteenth and Twentieth Centuries." *The Economic Journal* 80: 850-872.
- Kremer, Michael, and Edward Miguel 2001. "Worms: Education and Health Externalities in Kenya." NBER Working Paper Number 8481, July 2001.
- Krueger, Anne. 1978. *Foreign Trade Regimes and Economic Development: Liberalization Attempts and Consequences*. Cambridge, MA: Ballinger.
- Krugman, Paul R. 1994. *Rethinking International Trade*. Cambridge, MA: MIT Press.
- Kuznets, Simon. 1955. "Economic growth and Income Inequality." *American Economic Review* 45(1): 1-28.
- Kuznets, Simon. 1971. *Modern Economic Growth: Rate, Structure and Spread*. New Haven, CT: Yale University Press.
- Lall, S. 1992. "Technological Capabilities and Industrialization." *World Development* 20(2): 165-186.
- Lewis, Arthur. 1954. "Economic Development with Unlimited Supplies of Labour." *Manchester School of Economic and Social Studies* 22:139-191.

- Lipton, M., and Martin Ravallion. 1995. "Poverty and Policy." In Jere R. Behrman and T. N. Srinivasan, eds., *Handbook of Development Economics, Volume 3*. Amsterdam: North Holland.
- Little, Ian Malcolm David, Tibor de Scitovsky and M.F.G. Scott. 1970. *Industry and Trade in Some Developing Countries*. Oxford: Oxford University Press.
- Lucas, Robert E. 1988. "On the Mechanics of Economic Development." *Journal of Monetary Economics* 22: 3-42.
- Mahalanobis, P.C. 1955. "The Approach of Operational Research to Planning in India." *Sankhya: The Indian Journal of Statistics* 16(1,2): 3-62.
- Mandelbaum, K. 1945. *The Industrialization of Backward Areas*. Oxford: Blackwell.
- Malthus, Thomas Robert. 1815. *An Inquiry into The Nature and Progress of Rent and The Principles by Which it is Regulated*. London: John Murray.
- Morduch, Jonathan. 1999. "The Microfinance Promise." *Journal of Economic Literature* 37(4): 1569-1614.
- Mukherjee, Anindita, and Debraj Ray. 1995. "Labor Tying." *Journal of Development Economics* 47: 207--239.
- Myrdal, Gunnar. 1957. *Economic Theory and Underdeveloped Regions*. London: G. Duckworth.
- North, Douglass. C. 1990. *Institutions, Institutional Change and Economic Performance*. New York: Cambridge University Press.
- North, Douglass C. 1991. "Institutions." *Journal of Economic Perspectives* 5(1): 97-112.
- Nurkse, Ragnar. 1953. *Problems of Capital Formation in Underdeveloped Countries*. New York: Oxford University Press.

- Okun, Arthur. 1975. *Equality and Efficiency*. Washington: The Brookings Institution.
- Pack, H., and Westphal, L. E. 1986. "Industrial Strategy and Technological Change", *Journal of Development Economics* 22: 87-128.
- Persson, T., and G. Tabellini. 1994. "Is Inequality Harmful for Growth?" *American Economic Review*, 84(3): 600-621.
- Pitt, Mark, and Shahidur R. Khandker. 1998. "The Impact of Group-Based Credit Programs on Poor Households in Bangladesh: Does the Gender of the Participant Matter?" *Journal of Political Economy* 106: 958-996.
- Prebisch, Raúl. 1962. "The Economic Development of Latin America and its Principal Problems." *Economic Bulletin for Latin America* 7(1): 1-22.
- Ranis, Gustav, Frances Stewart, and Alejandro Ramirez. 2000. "Economic Growth and Human Development." *World Development* 28: 197- 219.
- Ranis Gustav, and S. A. Mahmood. 1992. *The Political Economy of Development Policy Change*. Cambridge, MA: Blackwell.
- Ranis, Gustav, and Frances Stewart. 1994. "Decentralization in Indonesia." *Bulletin of Indonesian Economic Studies* 30.
- Ranis, Gustav, and Frances Stewart. 2001. "The Debt-Relief Initiative for Poor Countries: Good News for the Poor?" *World Economics* 2(3): 111-124.
- Ravallion, Martin and Shaohua Chen. 1999. "When Economic Reform is Faster than Statistical Reform: Measuring and Explaining Inequality in Rural China." *Oxford Bulletin of Economics and Statistics* 61: 33-56.
- Ravallion, Martin and G. Datt. 1999. "When is Growth Pro-Poor? Evidence from the Diverse Experience of India's States." Policy Research Working Paper WPS 2263, World

Bank.

Ricardo, David. 1951. "On the Principles of Political Economy and Taxation." In Piero Sraffa, ed., with the collaboration of M.H. Dobb, *The Works and Correspondence of David Ricardo, Volume I*. Cambridge: Cambridge University Press.

Rodrik, Dani. 1996. "Understanding Economic Policy Reform." *Journal of Economic Literature* 34(1): 9-41.

Rodrik, Dani. 1999. *Making Openness Work: The New Global Economy and the Developing Countries*. Washington, D.C.: The Overseas Development Council.

Romer, Paul. 1990. "Endogenous Technological Change." *Journal of Political Economy* 98(5): S71-S102.

Rosenstein-Rodan, Paul. 1943. "The Problem of Industrialization of Eastern and South-Eastern Europe." *Economic Journal* 53: 202-211. Reprinted in A. N. Agarwala and S. P. Singh, eds., *The Economics of Underdevelopment*. Bombay: Oxford University Press.

Rosenzweig, Mark, and Kenneth Wolpin. 1993. "Credit Market Constraints, Consumption Smoothing and the Accumulation of Durable Production Assets in Low-Income Countries: Investments in Bullocks in India." *Journal of Political Economy* 101(2):223-244.

Rosenzweig, Mark. 1988. "Labor Markets in Low Income Countries." In Hollis Chenery and T. N. Srinivasan, eds., *Handbook of Development Economics, Volume 1*. Amsterdam: North Holland.

Schultz, T. Paul. 2001. "School Subsidies for The Poor: Evaluating a Mexican Strategy for Reducing Poverty." Discussion Paper, No. 102, Food consumption Nutrition Division, International Food Policy Research Institute, Washington D.C.

- Schultz, Theodore W. 1964. *Transforming Traditional Agriculture*. New Haven, CT: Yale University Press.
- Schumpeter, Joseph A. 1959. *The Theory of Economic Development*. Cambridge, MA: Harvard University Press.
- Sen, Amartya Kumar. 1992. *Inequality Reexamined*. Cambridge: Harvard University Press for the Russell Sage Foundation.
- Sen, Amartya Kumar. 1985. *Commodities and Capabilities*. Amsterdam: North-Holland.
- Singer, Hans Walter. 1950. "U.S. Foreign Investment in Underdeveloped Areas: The Distribution of Gains Between Investing and Borrowing Countries." *American Economic Review, Papers and Proceedings* 40: 473-485.
- Skoufias, Emmanuel. 2001. "PROGRESA and its Impacts on the Human Capital and Welfare of Households in Rural Mexico: A synthesis of the Results of an Evaluation by IFPRI." International Food Policy Research Institute, Washington DC.
- Smith, Adam. 1880. *The Wealth of Nations*. Oxford: Clarendon Press.
- Solow, Robert. 1956. "A Contribution to the Theory of Economic Growth." *The Quarterly Journal of Economics* 52: 65-94.
- Solow, Robert. 1957. "Technical Change and the Aggregate Production Function." *Review of Economics and Statistics* 39, 312-20.
- Srinivasan, T. N. 1994. "Human Development: A New Paradigm or Reinvention of the Wheel?" *American Economic Review, Papers and Proceedings* 84(2): 238-243.
- Stewart, Frances. 1977. *Technology and Underdevelopment*. London: MacMillan.
- Stiglitz, Joseph E. 2002. *Globalization and its Discontents*. New York: W. W. Norton and Company.

- Stiglitz (1991), "Some theoretical aspects of the privatization: application to Eastern Europe",  
Paper presented for the Third Villa Mondragone International Conference, Rome, June  
1991.
- Streeten, Paul. 1994. "Human Development: Means and Ends." *American Economic Review, Papers and Proceedings* 84(2): 232-237.
- Sugden, Robert. 1993. "Welfare, Resources, and Capabilities: A Review of Inequality  
Reexamined by Amartya Sen." *Journal of Economic Literature* 31: 1947-1962.
- Townsend, Robert. 1994. "Risk and Insurance in Village India." *Econometrica* 62(3): 539-591.
- Udry, Christopher. 1994. "Risk and Insurance in a Rural Credit Market: An Empirical  
Investigation in Northern Nigeria." *Review of Economic Studies* 61: 495-526.
- ul Haq, Mahbub. 1992. "Human Development in a Changing World." UNDP Occasional Paper  
No. 1.
- United Nations Development Program. *Human Development Report*. Various Issues.
- Wade, Robert. 1990. *Governing the Market*. Princeton, NJ.
- Williamson, Oliver E. 1975. *Markets and Hierarchies*. New York: Free Press.
- World Bank. 1997. World Development Report. *The State in a Changing World*. New York:  
Oxford University Press.