The Pakistan Development Review
32 : 4 Part I (Winter 1993) pp. 357–386

Economic Development and Development Economics

SYED NAWAB HAIDER NAQVI

To state that development economics is about economic development is now considered beyond debate. But opinions differ about what constitutes economic development and its proper index; in particular whether the growth of per capita income adequately captures its flavour. Thus, instead of being regarded, *à la* Lewis, as just a synonym for capital accumulation going above a certain critical level, development economics is now also required to respond to such challenges as raising the *quality* of life that people succeed in achieving by living longer; by being more literate in addition to being more prosperous; and, environmentally speaking, by making the development process sustainable. Indeed, our discipline is being asked to encompass an ever wider set of problems and venture into domains where it has not entered before: namely, the choices that people make; the economic and political freedoms they enjoy; the heavy incidence of poverty among the least privileged in the society, including the rural poor; the unjust social and economic structures that must be *changed*; the regulatory framework that needs to be evolved to enable the market to work–hopefully in the interest of the society. What complicates matters even more is that to be able to address many of these issues, development economics must transcend the self-imposed boundaries of strict positivism and acquire an overarching ethical vision. If mainstream economics is (rightly) regarded as a difficult science, development economics is even more so.

As always, such a broadening of the scope of the discipline has come about mostly in response to the happenings in the real world; and, to a much lesser extent, as a result of the events endogenous to the economic science that we review in this address. For instance, on the basis of a set of limited observations about the real world, it has been asserted that a relief in the intensity of poverty among the very poor and an improvement in the *quality* of life of the people in general are not necessarily associated with the gains in the per capita GNP. Thus, a whole-time

Professor Naqvi is President, Pakistan Society of Development Economists, and Director, Pakistan Institute of Development Economics, Islamabad.

concern for human development has been recommended by some as the proper domain of development economics; while others, in violation of the Law of Gravity, prescribe the 'trickle-up' of rural development rather than the 'trickle-down' effects of the growth rate of the GDP as the proper course for economic development. What differentiates these formulations from the standard ones is that they downgrade the per capita GNP itself as a reliable *means* to achieve the agreed ends of economic development–namely, raising the level of economic well-being of the people.

Another important addition to development economics' menu is an explicit concern of maintaining macro-economic stability–i.e., reducing budgetary and trade deficits, maintaining optimal rates of foreign exchange, minimising inflation, etc. This has happened in response to the macro-economic imbalances associated with economic development in some developing countries (and in the developed countries). Much of this represents a (healthy) antidote to the Keynesian unconcern about monetary policy; but it is often pushed to the Friedmanite extremes, without paying much regard to the processes of growth and employment generation, which are the primary concerns of development economics.

To comprehend such a wide variety of issues that now compete to secure a place on the agenda of development economics, the state of the art can be summarised under three related headings: (i) the factors contributing to the growth of per capita GDP; (b) the problems of macro-economic stability; and (c) the issues about securing greater distributive justice for the people. The aim of my address is to highlight the main points of consensus as well as divergence in the evolution of development thinking with respect to each of these areas. While my inventory of such points is inevitably selective, I have tried to be 'representative'. In the process of reviewing what others have said on the subject, I will also 'reveal' my own preferences about what constitutes the proper domain of development economics and what direction it should take to perform its appointed mission–which is to quicken the pace of economic development so as to rescue developing countries from the incubus of poverty.

The material that I shall present under each of the foregoing categories is woven around a central stylised fact of economic development which is not always clearly recognised: namely, that the process of economic development is not unidirectional; in fact, it is organically multi-dimensional in character. It is ultimately about reducing poverty, but to that end the growth of per capita income must be maximised, a regime of approximate macro-economic stability must be maintained, and a modicum of distributive justice must be ensured for all people. But these three elements of the process are, essentially, so interrelated with one another that along any viable path of economic development their equilibrium values must be simultaneously determined. Thus, the growth rate of the GDP and of population, the process of structural transformation brought about through balanced or unbalanced growth or the big "push", the raising of the ratio of capital accumulation and saving to the GDP, the size of the budgetary and the trade deficits, the fluctuations in the exchange rate and the rate of inflation, the rate of unemployment, the level of real wages, and the share of labour in the GDP must all be determined together–and kept focused on achieving the agreed ends of development. That being the dimension of economic development, the discipline of development economics has a busy schedule ahead.

Having entered these caveats, I now turn to describing each element of the proposed taxonomy of development economics.

THE PRINCIPAL FACTORS PROMOTING GROWTH

(a) The Demographic Factors in Economic Development

A quest for measures that can hold down the high population growth rates in order to create an enabling environment for economic progress has been mainly responsible for a study of the demographic factors in the development process. The main stylised fact in this context is that a growth in per capita income has everywhere been accompanied by a significant decline in fertility rates from six or more births per woman to about two or less [Easterlin (1989)]. More recently, East Asian countries doubled per capita income in about a decade not just because their GNPs grew very fast, but also because they could achieve, within a decade or so, an unprecedented reduction in the fertility rates.

A low population growth rate is extremely important to achieve high growth rates of per capita income; but there is also the sceptical point of view, noted by Kuznets (1966), that *high* rates of population growth can both favourably and adversely affect economic development; and that in the European case population growth has contributed positively to economic development. Then there is the "revisionist interpretation" that a high rate of population growth presumably exacerbates the debilitating effect of many deeper factors on economic development [*WDR* (1984); National Research Council (1986)]. To really decide the issue, a formal macro-econometric model must be used in which the macro working of the economy is linked with decision-making at the household level, so that the size of the family is determined simultaneously with the level of economic activity [Birdsall (1988)]. But the truth is that a high rate of population growth in excess of 2.5 percent–implying a doubling of population in 25–28 years–is inconsistent with the efforts to raise the quality of life; this cannot happen without achieving a (demographic) transition from near-equality of the death and births rates at high levels to near-equality of the birth and death rates at low levels [Coale 1989)]. This is particularly the case in developing countries where arable land and water are scarce, property rights are ill-defined, and government policies are biased against labour [Kelly (1988)].

Mostly in response to such considerations, population growth is increasingly regarded as endogenously determined by the interplay of the economic and demographic factors, rather than being sent to the exile of exogeneity as in the neo-classical tradition. (That formal modelling efforts in this direction have not yet borne fruit is another matter.) Hence, one should be concerned not only with the causes of population growth but also with its economic and demographic consequences. The rate of population growth, once a sufficiently low mortality rate has been attained, is mainly regulated by the forces operating on the fertility rates; a process which, in turn, is determined by both the economic and demographic variables–e.g., income, literacy levels (especially of the mothers), rural-urban and international migration, etc. The demand for children declines as socio-economic progress gathers momentum because an increase in the relative price of children outweighs the (weak) positive income effects [Becker (1960); Behrman and Wolfe (1984)]. On the supply side, the easy availability of safe contraceptives to the prospective parents is one of the crucial variables for the success of population-reducing policies [Coale (1984)].

(b) From Non-Human Capital to Human Capital

The research programme on human capital formation–which explicitly recognises the significant contribution of human beings to economic development–has of late been recognised in development thinking. This concept is obviously important because as much as the accumulation of units of physical capital and labour, the secular improvements in the quality of labour–due to improvements in education, training, longevity of life, health–and the efficiency of capital-use have accounted for much of the unprecedented growth in per capita income in modern times [Denison (1967); Kuznets (1966); Kendrick (1976)].[1] The general idea behind this research is to regard investment in education and/or health as a form of investment embodied in the income-producing

[1]However, it will be unwise to de-emphasise the importance of (physical) capital accumulation in the process of development. Thus most studies show that factor inputs have accounted for a much higher proportion of growth in the developing countries than in the developed countries, partly because capital accumulation also acts as a carrier of technological change [Syrquin (1988)].

economic agent [Schultz (1962); Becker (1962)]. The yield on such investment takes the form of an increase in a person's skills and earning powers and the resulting increase in the efficiency of decision-making [Rosen (1989)]. The peculiarity of such investment is that it is desired both as an end in itself and as an input into the development process. This idea has been around since Adam Smith, who recognised an improvement in the workers' skills as the basic source of economic progress, but it found currency in the economic literature during the last 25 years or so. In the development literature, and at the policy-making level, it has become fashionable only recently.

(c) The Importance of Being Literate and Healthy

Most empirical research shows a systematic relationship between education and the economic success of the recipients of education [Miller (1960)]. This explains why both the parents and the governments set aside substantial proportions of their income for educating children [Schultz (1981)]. An increased investment in education also creates a "literate culture" which facilitates a wider, quicker, and an easier dissemination and acceptance of new techniques of production.

Education is also shown to have important productivity-enhancing effects for the males as well as the females. More importantly, in the area of female education, the apparent beneficial effects of education go beyond the (induced) increased productivity of labour. For instance, increasing the investment in female education also pays dividends in the form of reduced child mortality, better child health, and many other intergenerational benefits. Summers (1992) shows that each year of schooling reduces the under-five mortality by upto 10 percent.

The standard interpretation of such phenomenon is that of the human capital school which considers this correlation (with appropriate controls for labour market experience) as being consistent with the view that higher earnings reflect higher worker productivity caused by the increments in education. On the other hand, the screening theory of education treats it merely (or at least mostly) as a signalling device for the pre-existing abilities that are useful in the labour market. The (extremist) proponents of the screening view argue that education has no effect on improving a person's skills; it rather serves as an informational device which helps the employer to identify the latent abilities of persons.[2] By and large, the available empirical evidence both for the developed

[2]Both these theories have been described well in the literature. For instance, see Arrow (1973) and Spence (1974) for the screening theory; while Becker (1964) and Mincer (1974) are among the outstanding proponents of the human-capital view.

as well as the developing countries seems to suggest that, while there may be some truth to the credentialist story, investment in education does enhance productivity substantially. The experience of the great 'growers' of the GDP–the East Asian countries in the preceding two decades and China more recently–has tended to support this point of view [Scitovsky (1985)].

Better health is clearly productivity-enhancing since it increases the strength, stamina, vigour, vitality and life-expectancy of people.[3] Many of the difficult problems in the economics of health arise from the fact that health is both an intermediate commodity that affects production and a final good that affects utility directly. On the other hand, at a practical level, many of the questions related to the health sector are closely intertwined with the issues of promoting an equitable income distribution and social justice. However, important questions need to be answered regarding the precise definition of health and health-care, the optimal level of spending on health, its financing, intersectoral allocation, and the relative roles of the private and public sectors in dispensing health-care.

(d) Raising Factor Productivity

Related to the idea of human capital formation is the awareness that an increase in total factor productivity is at least as conducive to economic growth as an increase in the inputs of capital and labour; and that if most developing countries have not grown as fast as they could have, then a relatively low contribution of total factor productivity is partly responsible for it. In general, the efficiency with which the inputs are used to obtain a given increase in per capita output is recognised as at least equally important as the accumulation of these inputs [Chenery and Srinivasan (1988)]. The need for technological change is pressing not only in the manufacturing activity but also in the agricultural sector, where it is needed to counteract the Ricardian Law of Diminishing Returns. Indeed, to sustain high rates of agricultural growth (5 percent and above), agriculture will need to become science-based and not just resource-based [Ruttan (1982)].

The European and the American experiences highlight the central importance of raising factor productivity for economic growth [Kuznets (1966); Denison (1967)]. But this has not been very clearly appreciated by development economists and policy-makers in many developing countries, and especially in South Asia–where the improvements in total factor productivity have been

[3]On the links between health and nutrition, see Behrman and Deolalikar (1988); and for a succinct survey see Fuchs (1987). The seminal theoretical work by Arrow (1963) and a major econometric-based monograph by Feldstein (1967) have been highly influential in this general area.

minimal. By contrast, the growth experience of the East Asian countries and China shows that their unprecedented growth rates, to a large extent, are due to the fact that total factor productivity there has been the highest in the world. Thus, during 1960–87, total factor productivity increased most (1.09) in the fastest-growing East Asians, whereas in the least growing Africa it was zero. As one would expect, in the moderate-growing South Asia, productivity grew at an intermediate rate–it was 0.6 percent [*WDR* (1991)].

(e) The Centrality of Structural Transformation

One widely noted feature of economic development is that the sectoral composition of production and employment changes over time. Thus, the share of manufacturing in the GDP and in resource-use typically rises, while that of agriculture declines over time. This tendency is referred to as "structural transformation", which sees the development process as a set of interconnected events focusing on structural transformation as a vehicle of economic growth [Syrquin (1988)].[4]

Related to the issue of increasing the share of manufacturing in the GDP is the problem of enhancing its employment-generating capacity. Then, reducing the population pressure on land is an integral part of the efforts to raise agricultural productivity and to enhance the size of the marketable surplus of agricultural products. In Lewis's scenario of sectoral transformation (1954)–as also in Fisher's (1935) and Clark's (1940)–surplus labour and capital march unidirectionally from (low-productivity) agriculture to (high-productivity) manufacturing. This scenario has not materialised in many Asian countries–which, to some extent, explains why the growth rates in these countries have been relatively slower than in the East Asian countries where structural transformation has gone very far.[5] For instance, in India and Pakistan agriculture continues to be home to more than 50 percent of the total labour force, the rest being divided between the manufacturing and the services sectors, the latter absorbing relatively more labour than the former.

But achieving structural transformation requires keeping a dynamic balance between agriculture and industry in the process of economic growth.

[4]The definition of structural transformation given in the text is a limited one. Other elements of structural transformation are: higher rates of capital accumulation (Lewis, Rostow), the changes in the sectoral allocation of employment (Clark), and changes in social institutions and the system of beliefs (Kuznets).

[5]Thus, for instance, while in Pakistan and India the share of manufacturing in the GDP is around 20 percent, the corresponding figure for South Korea is a little over 30 percent even though the process of industrialisation started much earlier in Pakistan and India than in South Korea.

The central point of such a balanced view of inter-sectoral relations is that manufacturing is the main contributor to economic development, but due attention should be paid, at the same time, to modernising agriculture so that it too grows at the optimal rate. The earlier view of using agriculture as a self-sacrificing provider of inputs to (infant) industries has not helped agriculture; it has not helped rural poverty either [Ruttan and Hayami (1970)]. Furthermore, the hypothesis that industrialisation unambiguously raises social welfare has been modified significantly by the high rates of effective protection, the high capital/output ratios, and the relatively low employment-generating potential of the manufacturing sector [Pack (1988); Naqvi and Kemal (1991)]. Thus, it has been suggested that if scarce capital resources had been "spread" more judiciously between agriculture and industry, the capital/output ratio would have been lower [Mellor and Johnston (1984)].

Due recognition should be given to the role of a steady increase in the supply of food at a relatively low price in alleviating poverty because doing this focuses attention on raising agricultural productivity in general–which then can become the basis of an even higher growth of the non-agricultural sector [Mellor (1986)]. Also, agriculture has been a vehicle for transferring productivity-raising technology–e.g., the Green Revolution technology–to the developing countries. And yet, it will be simplistic to think that growth rates of the GDP in excess of 7 percent or so can be sustained just on the basis of a fast-growing agriculture. By the same token, it is sheer romanticism to rely *entirely* on the strength of the "trickle-up" effects of agricultural growth secured "by mobilising the rural poor" [Jazairi *et al.* (1992)]. The hard fact is that there is no other way to achieving high levels of economic well-being than by accepting industrialism as the high point of economic development [Bell (1990)].

MINIMISING THE PANGS OF MACRO-ECONOMIC STABILITY

Learning both from neo-classical analysis and development experience, economic development is now seen as best attained within the framework of macro-economic stability [*WDR* (1991)]. In general, the issues connected with *financing* economic growth have come to assume more importance than in the past. This is all the more true if the growth rate is high–say, 7 percent plus–than when it is low. The need to keep inflation within acceptable limits is even greater in the context of a high-growth regime, partly because inflation reduces exports and growth by increasing the domestic absorption of the traded goods. To this end, while a high rate of the GDP is attained, the budgetary deficit, the imbalance in international payments, and the rate of monetary expansion must be–and among the successful developers have been–contained within acceptable limits.

(i) The Equity and Efficiency of Taxation

Financial resources need to be raised–which entails a redirection of real resources from the private to public hands–to finance the development and non-development expenditures of the government in the developing (as also in the developed) countries. Typically, these expenditures exceed tax revenues (plus the profits of public undertaking), thereby creating a budgetary deficit which must be met by tax and non-tax resources. Notwithstanding the attempts by the governments to raise tax revenue to finance the deficits, such efforts are not always crowned with success, partly because higher tax revenue typically induces a higher government expenditure [Please (1971)]. But minimising budgetary deficits primarily requires mobilising domestic tax resources in a manner that the dictates of efficiency and equity will be met at the same time; which, however, is easier said than done because there is an element of a trade-off between the two–especially with respect to commodity taxation. Thus, commodities with low elasticities of substitution will be taxed at a significantly higher rate than those with a high elasticities of substitution if efficiency is emphasised, while the reverse will be done if equity considerations claim priority [Musgrave (1976); Atkinson and Stiglitz (1972)].

Efficiency in taxation requires minimising the "excess burden"–i.e., the unintended interference with the market mechanism; while the equity objective is met by ensuring *both* horizontal equity and vertical equity [Musgrave (1961)]. Broadly speaking, doing so will require broadening the tax base and lowering the tax rates. Also, capital gains should be treated as ordinary income, with appropriate allowances made for averaging and loss offsets; and the same holds for gifts and bequests. The taxation structure should be kept reasonably progressive–but not punitive; and such a structure should be combined with a system of transfer payments to provide "safety nets" to the poor people who cannot earn enough through the market system [Pechman (1986)]. As for indirect taxation, taxes on domestic production (consumption) should replace the taxes on foreign trade. Part of the motivation of this type of reform is to minimise the incidence of the rent-seeking activity, which is alleged to be associated with the regulation of foreign trade through import licencing and quotas–whereby the income of a certain class of the society is raised above a 'normal' level without guarantees of any reverse flow of productive activity [Krueger (1974); Srinivasan (1985) and Bhagwati (1987)].

Most discussions of tax policy concentrate on maximising resource-generation even when the specific tax instruments are not equitable but easy to collect and administer–e.g., the generalised value-added tax is universally recommended as a panacea for the resource-generation problem, even though in terms of its incidence it is typically regressive [Ahmed and Stern (1989)]. Another influential line of research, which de-emphasises equity and focuses almost entirely on efficiency, is that pioneered by the search for an "optimal taxation" formula [Diamond and Mirrlees (1971)]. The basic assumption of this research is that all individuals are subject to identical utility functions.[6] But making such an assumption trivialises the basic problem of taxation which *seeks to apply (tax) treatment in a world of unequals.* Thus, an exclusive emphasis on efficiency is an aspect of the emerging consensus on fiscal policy which is better avoided.

Equity in taxation is not any more irrelevant than tax efficiency for developing countries–if only because pursuing efficiency considerations alone, without regard to equity, would yield an unacceptable ideal formula of imposing a universal head tax! At any rate, at the implementation level, a perception that the rich do not pay taxes as much as they should undermines the credibility of the entire tax system. Thus, not only should the tax/GDP ratio rise over time, but also a greater part of the tax effort should take the form of direct taxation with the required degree of progressivity. Notwithstanding the claims that in some countries the incidence of indirect taxation may also have been (mildly) progressive [Chelliah and Lal (1978)], the fact remains that however careful may be the selection of the objects of taxation, indirect taxation is regressive with respect to its incidence [Goode (1984)].[7]

(ii) Regulating Monetary Expansion

The pioneers of development economics showed a relative unconcern to monetary policy, mostly under the influence of Keynesian economics. By contrast, Friedman's advocacy of the demand and supply of money as the paramount determinants of aggregate expenditure did not find an audible echo in the development literature.[8] Since then, development theory and policy has shown a greater awareness of the monetary matters. Mostly under the influence of the IMF, there is now a greater understanding of the need to restrain money supply (M1, M2, M3 or whatever) to keep the rate of inflation under control.

[6]When such an assumption holds, uniform taxation of the taxed commodities should be preferred to selective taxation because the former is non-distortionary and, thus, optimal [Sandomo (1976)].

[7]Which, however, does not mean that direct taxation *per se always* adds to progressivity; thus, a poll tax is neither progressive nor equitable.

[8]It is, thus, typical that there is not a single study on the monetary problems of the developing countries in the two-volume *Handbook of Development Economics* (eds) Chenery and Srinivasan).

This, because inflation is generally seen as unhelpful for economic growth due to its *unpredictability as well as its variability*–both of which adversely affect investment, and are the more damaging at a higher than at a lower level of inflation. It is, thus, important that inflation be kept within a 2-3 percent range. Going any lower may not be helpful, however, because with a zero rate of inflation the real rates of interest cannot be made negative, which may be necessary to fight recession [*Economist* (1992)].

Friedman (1960) emphasised that a constant growth of the money stock, divorced from the budget, would be essential for stabilising the economy–referred to as the cult of "monetarism" [Brunner (1968)]. Econometric exercises show that money supply does have a significant (direct and indirect) impact on inflation. However, a somewhat one-sided emphasis, in the monetarist vein, on the restriction of money supply ignores the even greater influence of the real variables–e.g., the rate of output expansion, especially that in the commodity-producing sectors, the prices of food imports, etc.–on the price level [Naqvi and Khan (1989)]. Indeed, there is the danger that an excessive restriction of money supply may injure growth and employment. The European experience does confirm that hard monetarism has adversely affected the growth potential of the European economies, and is to some extent responsible for high rates of unemployment [UN (1992)].

Yet another task of monetary policy in developing countries is to influence the pattern of investment [Eshag (1990)]. This is arranged through specialised banking and credit facilities advanced to areas of high social priority–e.g., promoting long-term investment as opposed to short-term investment preferred by the commercial banks; the agricultural development loans which commercial banks do not generally favour because of the poor quality of the collateral; and the essentially risky nature of agricultural production which makes the recovery of loans difficult.

(iii) Export Optimism, Foreign Capital inflows, and Exchange Rate Policy

The elasticity (and export) pessimism of the early 1950s–which partly led to the balanced-growth doctrine, including an overemphasis on import substitution with respect to heavy industry–has been replaced of late by a greater optimism of the positive role that foreign trade plays in accelerating domestic economic growth mainly by enhancing the domestic production possibilities. This happens partly because foreign trade allows each country to concentrate on areas of its comparative advantage; and partly because it induces welfare-raising commodity substitutions, in favour of the lower-priced and higher-quality imported goods [Lipsey (1968)].

While the example of the East Asian countries is cited, the pendulum in this respect may have swung too far in the opposite direction. Thus, as regards its effects on domestic economic growth, export expansion is held to be unambiguously superior to import substitution–partly because the former signals the discipline of the market, while the latter symbolises an *etatistic* bias in domestic policies [Krueger (1978)]. But this position is as extreme as the earlier one which downgraded the role of international trade. The causative link between exports and growth might have worked either way; the high rate of economic growth could have been the cause as well as the effect of greater export expansion [Bhagwati (1988)]. Then there are the success stories, e.g., Japan, where the GNP growth has not been predominantly export-led but, instead, has been driven by the growth of domestic demand–which suggests that the choice of the trade strategy is not independent of the state of the world economy [Eatwell (1991)].

As always, the truth lies somewhere between the extreme positions. Too much emphasis on the exports can also be bad for the economy. Both on the theoretical and the empirical grounds, the optimal policy is to seek a balance between import substitution and export expansion rather than favouring the one at the expense of the other. The success of an all-out (even aggressive) export strategy, for instance, is not guaranteed when the world economy, threatened by Western protectionism, is slowing down. But there is an element of truth in the proposition that, in a regime of distorted domestic prices, world prices may signal efficient (first-best) input and output configurations via the links between the world prices and the relative scarcities of tradeable goods as well as between the tradeable and the non-tradeable goods [Diamond and Mirrlees (1971)].[9]

Foreign Capital Inflows: Earlier scepticism about the negative effects of foreign capital on domestic savings (investment) has been replaced by a relatively more balanced view. The concern now is about the small size of the official development assistance (ODA), and about its becoming negative. There is a fear that if these trends persist, the development prospects of the developing countries will be affected adversely. Thus, notwithstanding an awareness of its adverse fall-out in certain cases, direct foreign investment (DFI) is now treated with greater respect; its size has grown consistently over the last 20 years

[9]Other important results in this context are that free trade is superior to restricted trade, and trade restriction in the form of tariffs is generally superior to the restrictions enforced by quotas. But when the source of the distortion is domestic, a subsidy on domestic production or on factor-use, as the case may be, is superior to tariffs [Johnson (1964); Naqvi (1969)]. But to the extent that import tariffs are necessary–i.e., when the source of distortion is 'foreign'–lower, and fewer, tariffs are better than higher and complicated ones.

[*WDR* (1991)].[10] The attitude is partly supported by an understanding that equity capital participation, in many ways, is superior to debt capital [Klein (1991)]. Also, the experience of the East Asian countries has shown that, by and large, DFI tends to play a catalytic role in the process of economic development by introducing higher management and marketing standards as well as better production techniques.

Also, earlier obsession with exchange controls and fixed foreign exchange rates has been replaced by a relaxation, even abolition, of many types of exchange restrictions, coupled with a system of adjustable exchange rates. In general, a regime of fixed exchange rates is considered to be inconsistent with domestic economic expansion. A regime of unified exchange rates, which is neutral with respect to the export and import activities, is considered superior to a system of multiple exchange rates which has an uncertain impact on the domestic and foreign trade sectors [Naqvi (1971); Bhagwati (1968)]. Also, exchange rates are now seen as endogenously determined by the interplay of the forces of supply and demand in the foreign-exchange market, and also as a means to regulate trade imbalances by redirecting domestic resources to the production of traded goods.

AIMING AT DISTRIBUTIVE JUSTICE

(i) Growth and Inequality between Income Classes

With few exceptions, the pioneers of development economics saw economic development as a 'bloody' process; it enhanced inequality, at least in a certain range [Kuznets (1955)].[11] Indeed, the literature is full of empirical support for Kuznet's U-conjecture [Ahluwalia (1976)]–even though many studies [e.g., Papanek and Kyn (1986)] suggest that the relationship could be either U-shaped (as inevitable) or J-shaped (as policy-induced). On the other hand, some recent studies show that economic development does not necessarily promote greater inequality in the distribution of income and wealth–which, of course, does not mean that it cannot. Thus, supporting the optimistic scenario, a recent World Bank study of thirty-two countries concludes that "there is no evidence to suggest that higher saving is positively related to income inequality or that income inequality leads to higher growth. If anything,

[10]The IMF has also been emphasising the same point while recommending corrective, if controversial, "structural adjustment programmes". Even though some of these recommendations are Friedmanite in nature and somewhat extreme, emphasising (excessive) exchange rate depreciation and restriction of money supply, yet their broad thrust is essentially in the right direction.

[11]Among the "pioneers", Tinbergen (1977) has stressed that economic growth should be firmly linked to the process of income distribution.

it seems that inequality is associated with slower growth" [*WDR* (1991)]. One can think of a mechanism whereby a more equitable distribution of income accelerates the rate of growth of the GDP. For instance, a reduced level of rural poverty, by increasing the real and nominal incomes of the poor people and their productivity, may have the effect of widening the size of the wage-goods market, especially that for food, which then accelerates the growth of the value-added in this sector and the manufacturing sector–thus raising the GDP [Mellor (1986); Jazairi *et al.* (1992)].

But one can think of mechanisms whereby growth is de-equalising. Thus, there is the possibility of "immiserising growth" in the face of (policy-induced) price distortions. As in Bacha-Taylor formulation (1976), it is possible to conjure up an "unequalising spiral of growth" in which "a rise in skilled employment, in relative demand for luxury goods, and in investment in the luxury sector feed on one another, accentuating inequalities all along" [Bardhan (1988)]. To the extent that a highly skewed distribution of income and wealth in an economic system plagued with social and economic rigidities makes such scenarios possible, remedial steps should be taken to arrange a more equitable distribution of income and wealth, a greater production of wage goods, and a redistribution of landed property through though land reforms, etc. But this is *not* an argument for slowing down the growth rate.

(ii) Growth and Inequality in the Functional Distribution of Income

The earlier literature predicted that the development process would normally worsen the *functional* distribution of income for labour [Galenson and Leibenstein (1955); Kaldor (1955)]. Lewis (1954) pointed out bluntly that "the central fact of economic development is that the distribution of income is altered in favour of the saving class". If the saving function was indeed of the classical type, as most of these economists assumed, and if there was no possibility of altering the factor-input mix by appropriate technological change, then such pessimistic scenario will follow as a logical necessity. But experience does not unambiguously support such a proposition. Indeed, as first highlighted by the European example, an increase in the demand for labour in the key productive sectors of the economy– presumably, first in the immediate neighbourhood of the growth poles–raises employment and the level of real wages. As the growth process intensifies, labour shortages are also created in sectors that are relatively more distant from the growth poles [Leontief (1983)]. This process can be facilitated by building a network of roads and communications, which by minimising labour-market segmentation (in a physical sense) should help equalise wages and employment opportunities–thus reducing regional inequalities.[12] The more recent development experience of the East Asian countries testifies to the strength of this redistributive mechanism. This hypothesis contrasts sharply with the earlier perception of economic growth as just another name for capitalist accumulation, implying a rising share of profit income.

It is interesting to recall that the star-performers among the developing countries–e.g., Japan, China, South Korea, Singapore, Malaysia, etc.–have been demonstrably less unequal than the lacklustre performers. Even among the moderately growing countries, those growing faster are more equal than the slower ones! And, with few exceptions, the absolute level of poverty tends to be lower among the fast-growers than among the slow-growers. Furthermore, among the more egalitarian countries, inequality and absolute poverty are less among the fast-growers than they are among the slow-growers.

(iii) Meeting the Ends of Distributive Justice

But having said that, it will be idle to assert that the trickle-down effect of high rates of growth will be sufficient by itself to significantly lower the level of income inequality. For instance, for the real wage to rise, labour supply must not increase enough to compensate for the increase in labour demand; and also that as wages rise labour should not, on the margin, be substituted for capital. Thus, for the functional distribution of income to improve, at least two conditions must be satisfied: (i) The employment-creating potential of the commodity-producing sectors, especially of the manufacturing sector, should be enhanced through labour-intensive technological change, wherever it is possible–except in those activities where efficient production requires a greater degree of capital-intensity (e.g., steel-making industry). (ii) Labour-force participation rate should be reduced through a higher level of school enrolment, and by reducing the rate of population growth, even as a high rate of economic growth increases the labour-force participation rate–say, by reversing the out-migration of labour as domestic wages rise towards the reservation wage [Naqvi, Khan and Ahmed (1992a)].

Furthermore, promoting distributive justice will also require state intervention where the market normally works perversely. In this category come such vital cases as an inequitable distribution of property rights in land, the women's low status in the economic and social sphere, the abominable (and

[12] A comparative study by Etienne (1992) shows that regional inequality–as measured by the level of the real wage and the rate of interest on consumption loans–is greater in the case of those areas (in India and Pakistan) which are poorly-connected by roads than those which are well-connected.

widespread) practices of child-labour and bonded-labour, the cases of acute poverty among the disabled, the old, and the sick, and, of course, the population problem. Thus, as economic growth gets going, the rural poor may get only a fraction of what they should get, the numbers engaged in child-labour and bonded-labour may multiply, the women's exploitation may become graver, the fertility levels may not fall significantly, and the incidence of poverty may not decline where the market mechanism does not operate. In all such cases, legislative action will have to be undertaken to regulate the private property rights in land, universalise the health-cover and literacy, abolish child-labour and bonded-labour, strengthen the position of women in the society; and so on [Naqvi (1992)]. Also, alleviating poverty may require repairing the deficiencies of the labour and capital markets and the provision of education and skill–all this supplemented by "complementary income maintenance provisions" [Atkinson (1991)].

UNSHACKLING DEVELOPMENT ECONOMICS AND ECONOMIC DEVELOPMENT

The preceding review of the dimensions of the process of economic development highlights the need for a 'clear-headed' development economics, freed from the deadweight of inconsistent ideas. I have spoken about some of these issues before, but they are important enough to merit recapitulation.

(i) From "Capital Fundamentalism" to "Human Development" to "Trickle-Up"

In the first two decades of the birth of development economics, economic development was simply interpreted as raising the rate of capital formation. Thus, according to Lewis (1954), "the central problem in the theory of economic development is to understand the process by which a community which was previously saving and investing 4 or 5 percent of its national income or less, converts itself into an economy where voluntary saving is running at about 12 to 15 percent of national income or more." The Rostowian take-off (1960) was similarly characterised as doubling the rate of capital formation and transformation of the productive structure of a representative developing country. Similarly, the big-push [Rosenstein-Rodan (1943)], the minimum-critical-effort [Leibenstein (1957)], the balanced-growth [Nurkse (1953)], and the unbalanced-growth [Hirschman (1958)] hypotheses–all focused on raising the levels of saving and investment as the only means to escape the "vicious circles" of poverty through the mediation of the "trickle-down" effect of economic growth. The question of distributive justice was, by and large, regarded as of secondary importance. In the climate of thought in which the pioneers wrote, "capital fundamentalism" was the predominant sentiment [Gillis *et al.* (1983)].

But, of late, economic development has been interpreted broadly–rather than just being narrowly concerned with maximising the growth rate of per capita income. It is being argued that economic development should instead be focused on bringing about an improvement in the quality of life–at least as measured by such indices of human happiness as the level of education and health, environmental improvements, and the degree of political freedom and civil liberties that people enjoy. Based on a somewhat limited evidence from five countries– i.e., China, Sri Lanka, Brazil, Mexico, and South Africa–it has been asserted that development policy should be concerned with the "ends" rather than the "means" of development. Whence it follows that the per capita income should be discarded altogether as an indicator of individual welfare and replaced by some more adequate measure of welfare. "The crucial issue, therefore, is *not* the time-dimensional focus of growth, *but* the salience and the reach of GNP and the related variables on which usual measures of growth concentrate" [Sen (1988)]. Following this line of thought, the UNDP has introduced the concept of "human development" to encompass "the production and distribution of commodities and the expansion and use of human capabilities." [*HDR* (1990)]; and to measure it, a Human Development Index (HDI) and a Human Freedom Index (HFI) have been proposed. These indices, it is claimed, capture adequately the success *actually* achieved by human societies on a wider front–not just on the economic front. This is because "people do not isolate the different aspects of their lives. Instead, they have an overall sense of well-being" [*HDR* (1990)].

Another train of thought advocated by IFAD seeks to focus on those means of development which guarantee that the ends of economic development will also be achieved–where the proper end of economic development has been identified as alleviating the living conditions of rural poor, who constitute about 36 percent of the rural population and number close to one billion persons. Thus, development economics, to be relevant, should metamorphose into a "new development paradigm" centred on (rural) poverty alleviation–so that the "rural poor are seen as partners in the growth process rather than passive beneficiaries of growth" [Jazairi *et al.* (1992)]. In the proposed paradigm, the hard-core development process is essentially "participatory" in nature, so that economic growth in general is sustained by the "trickle-up" effects of rural development–and the rural poor are not merely recipients of the niggardly trickle-down effects of economic growth.

Such recommendations are extremely valuable in that they focus the policy-maker's attention on the "ends" of development, especially literacy, longevity of life, human freedom, and rural poverty; they also give development policy a sense of purpose and direction. In an ultimate sense, such approaches bring the ethical imperatives explicitly into the economic calculus–because taking a full measure of such ends requires a clear recognition of ethical values. However, on the basis of such arguments, it is a questionable proposition to go so far as to substitute the means for the ends of development, i.e., replacing per capita income as an index of economic development by an alternative indicator of economic or social well-being; or even worse, de-emphasising the importance of attaining high rates of growth of per capita income–say, to reduce the incidence of poverty in the developing countries. Thus, to show that a higher *level* of income may not always predicate a better quality of life is not necessarily an argument for a slower rate of growth of the per capita GNP. Furthermore, if, as in the IFAD and the UNDP approaches, the ends of economic development also become the means to achieve it, then these are no more than mere definitions of what constitutes development. They do not constitute a logically valid strategy.

The recent development experience shows that, with few odd exceptions the countries which have consistently grown at a fast rate (the GDP growing in excess of 7 percent or so) are also the ones whose record in terms of macroeconomic stability and the 'quality of life' is significantly better than that of those where growth rates have been moderate (the growth of the GDP between 3 to 5 percent); and the record of both these groups is better than that of the slow-growing countries (the GDP growth between 1 and 2 percent). This is so even if the relative performance of this (randomly drawn) sample of countries is rated by reference to the decisiveness of structural transformation, the low average rate of inflation, a (milder) average depreciation of the domestic currency, a lower rate of unemployment, a higher life-expectancy at birth, and the adult literacy rate. The experience of these countries also shows that, with few exceptions, such a policy is more likely to alleviate poverty than a slow-growth policy [Naqvi (1993)]. The same conclusion holds for the relationship between the per capita GNP and the percentage of people below the poverty line. Simple computations using the data given in the IFAD report conclusively show that, *in general*, there holds a significant *negative* relationship between the growth rate of per capita GNP and the level of rural poverty–and the size of the correlation coefficient is bigger in countries where agriculture contributes more to the GDP than where its share is smaller. Incidentally, this finding *contradicts* the following contrary claim made in the IFAD report: "There is no association between the annual rate of growth of GNP per capita and changes either in the income share of the lowest 20 percent or in the percentage of poor people among the rural population." [Jazairi *et al.* (1992)]. Any new development paradigm based on such an observation is *ipso facto* invalidated.

(ii) The Mixed Blessings of Market-friendliness

It has been argued that state intervention need not always be motivated by considerations of social welfare but as a means to maximise the welfare of the vested interests and pressure groups. Furthermore, state intervention is also seen as a "costly" activity in the sense of involving deadweight losses for the society in the form of unproductive rent-seeking activities [Becker (1983); Krueger (1974)]. If this is true, the earlier *etatisme* displayed by the policy-makers and development economists, according to this line of thinking, should be replaced by a "market-friendly" attitude [*WDR* (1991)].

The basic argument is that if only the government abstains from interfering in the factor and product markets, the first-order rules of competitive efficiency will 'again' come into play–'again', because these rules are assumed to rule the roost in the state of bliss, which is made inaccessible by sinful government intervention. But buying a one-way ticket to this textbook primordial state (of nature)–distinguished by the equality of the marginal rates of substitution in consumption with the marginal rates of (domestic and foreign) transformation in production–may not be a rewarding experience because 'market success' is guaranteed only if there are "enough" markets; if both the consumers and the producers behave competitively; and if equilibrium exists. A non-satisfaction of any of these conditions amounts to a withdrawal of the guarantee of market success [Debreu (1959)]. Fragile, indeed, is the basis of market success. Thus, "a pure market system with its high degree of decentralisation runs the risk of bringing inequitable results and being inefficient because markets can never be complete, because externalities exits, and because the public wants tend to be neglected." [Malinvaud (1989)]. It also follows that if (buyers' or producers') monopolies exist, or if relevant markets do not exist, then market failure is unambiguous. Whether this failure can be effectively repaired by direct government intervention remains a contentious issue. But it should be clear that leaving it to a private monopoly also offers no guarantee of market success.

After about two decades of a somewhat counterproductive advocacy of magic (of the free markets), the goals of economic policy are now considered to be better achieved by using both the government and the market to maximise social welfare. According to some, the government should concentrate on creating the appropriate physical infrastructure and implementing an effective legal and regulatory framework within which the markets can operate efficiently. The rest, especially the organisation of production and the distribution of goods and services, should be left to the market–even though in this respect also it would be unwise to pre-empt the public sector altogether.

On this issue, the best course of action perhaps would be to combine ideological agnosticism with empirical realism. While one must certainly not entertain starry-eyed sentimentalism–of the state's always acting as a conscience of the society–it is hard to believe that it never (or seldom) acts in the public interest. Similarly, to discredit the government on the efficiency grounds is not necessarily an unqualified vote in favour of market capitalism. The classical arguments based on the phenomenon of external economies, the moral hazard problem, and asymmetric information do point to a positive and large role of the state. And, as noted above, the same holds when ethical considerations–namely, supporting the least privileged in the society in all states of the economy–are decisive.

(iii) Taking "Sustainability" Too Far

The concept of sustainable development has become important in the context of efforts to raise the quality of life on Planet Earth. It is also seen as tied to the question of inter-generational equity and long-term economic growth. The relevance of the environmental variables to the economic and demographic variables arises from the inevitable influence of economic growth on the pattern of physical resource-use, which, in turn, also leads to weakening Nature's recycling capabilities. For instance, a high rate of population growth typically leads farmers to impinge heavily on both the extensive and the intensive margins of cultivation, which results in deforestation and a depletion of soil fertility. Similarly, in a regime of wide income and wealth differentials, such a process also has a crowding-out effect–the rich monopolising a rise in income (by privatising common property resources and forcing the poor only to marginally productive lands).

Environmental degradation provides a classic example of externalities–one where the market solution may not be feasible to keep the pollution at a reasonable level. The reason is that there may not exist prices for certain scarce environmental resources. To some extent, the introduction of surrogate prices in the form of unit taxes or "effluent fees" may internalise such external diseconomies to enable the market to function efficiently in providing the needed signals on the use of the scarce environmental resources–e.g., clean air and water [Cropper and Oates (1992)]. This may be feasible if, *à la* Coase (1960), a negotiated solution can be reached between the polluters and those adversely affected by pollution–in which the former bribe the latter into accepting a higher level of pollution than would otherwise be desired. But, as is well known, the success of such negotiations and their enforcement is guaranteed only if their cost is zero or near-zero; but this is hardly ever the case.

Problems arise when a greater investment in environmental improvement reduces economic growth. Thus, an increase in "dirty" GNP may contribute to environmental degradation; contrariwise, a "clean" GDP may decelerate growth. [Klein (1983).] Just as a disregard of environmental degradation is dangerous and counter-productive, so is uncompromising "eco-radicalism"; being essentially non-quantitative, it does not make any elaborate cost-benefit calculation and minimises the importance of economic growth for human progress. The focus of public policy in the developing countries should *primarily* be on those cases where improving the environment does not hurt growth. This particularly holds for efficient anti-poverty packages, which reduce poverty by cleansing the environment at the same time: by ensuring the property rights of the cultivators through efficient land reforms; and by taxing the exercise of property rights where they directly degrade the environment–e.g., the cutting of forests on a large scale. Here also, with the enactment of proper legislation, the market may be enabled to function efficiently [*WDR* (1992)].

(iv) Development Economics with an Ethical Vision

Since its inception, development economics continues to be the rock of "positivity", leaving little room for "warm-hearted" value judgements about the "goodness" of a social order–even though enough lip-service has been paid to the notion of social justice. Hence, like neo-classical economics–indeed, also like the Marxian economics, development economics remains ambivalent when making a specific choice involving a value judgement.[13] An important implication of this irrevocable marriage to positivity, however, is that issues like the distribution of income may not be considered relevant for development economics–because the "equality of result implies a distribution process that is the antithesis of the market" [Coleman (1989)].[14]

This is also the message coming from Nozickian non-consequentialism, which advocates the priority of specific processes over results. According to this view, any attempt to "pattern" the existing distribution of income and wealth may also be regarded as an infringement of individual rights [Nozick (1974)]. Thus, the goodness of a society is evaluated by reference to the (legal)

[13]An outstanding exception is Tinbergen who has consistently emphasised the importance of moral values in the economic calculus. See, for instance, Tinbergen (1982), where he explicitly states: "Socialist policy, if it wants to shape a future human race living in happiness, needs a more profound basis–either religious or humanist."

[14]Instead, the neo-classical position is wedded to 'liberty', which requires a degree of equality before the law and the equality of opportunity.

correctness of the procedures rather than by judging the consequences of the exercise of their ('moral') rights by individuals. Such moral rights of the individuals include private property rights, exchanging such rights freely, and donating them or bequeathing them to posterity. Thus, for instance, the feudal structures that dominate the economic landscape in most developing countries may be justified because in this view of moral rights these have "arrived" today through correct legal procedures. Also, insofar as extreme poverty and hunger, even famines, have been shown to result from the exercise of legally sanctioned rights rather than by natural calamities [Sen (1981)], any attempt to remedy such obvious social injustices will be held, according to this "liberal" view, to be an infringement of individual freedom. By virtue of its commitment to the priority of liberty thus, development policy will not be doing enough to provide food and other primary goods needed by the least privileged in the society.

Needless to point out, it will be suicidal for development policy to de-emphasise distributional issues on the basis of such a "liberal" philosophy–partly because public policy will then be deprived of any scientific criterion by which to judge the "correctness" of one growth path that exacerbates distributional inequities as compared with another growth path that lowers the level of distributive injustice. More relevant to our discipline is the (amended) Rawlsian approach–especially the Difference Principle–which focuses on the advantage of the least privileged in the society, while stipulating that the numbers of the least privileged in the society are also reduced at the same time. Such an advantage is measured in terms of "primary goods", things that every rational human being wants– "rights, liberties and opportunities, income and wealth, and social bases of self-respect." [Rawls (1971).] An attractive feature of the Rawlsian principle for the developing countries is that it is consistent with the prevalent notions of justice–especially those concerned with a morally enjoined assignment of fundamental rights and duties and a right division of advantages from social cooperation.

CONCLUDING OBSERVATIONS

Economic development has been correctly identified as the "foundational motivation of the subject of economics in general" [Sen (1983)]; but development economics clearly has a comparative advantage in giving this motivation a concrete shape–indeed, it has an absolute advantage in this respect because neo-classical economics has all but forgotten about development problems. To put it more emphatically, development economics has no identity apart from being concerned explicitly and actively with the business of economic development. There is thus no warrant for declaring it dead, like Hirschman (1981), as a discipline in its own right; nor is there a case for it to be absorbed back into neo-classical economics and survive, at best, as its "applied branch" [Bell (1990)] in the developing countries. Indeed, for its health, it is best to accept the paradigmatic character of development economics.

Opinions differ about what the concerns of development economics should be–e.g., an ample provisioning of the basic needs of the poor, a higher investment in education and health to facilitate human development, and a greater emphasis on mobilising the rural poor to tackle rural poverty. But there is no gainsaying that economic development cannot take place without per capita income rising in the first place; without a regime of macro-economic stability; and without generating adequate employment so that the factor rewards increase and the functional distribution of income moves in favour of labour.

However, this multi-dimensional character of economic development may not always materialise without an appropriate policy regime, especially where markets do not exist, or when asymmetric information, 'fraud', moral hazard, and non-self-correcting externalities do not let markets work efficiently. In these cases, the state must intervene to meet the agreed 'ends' of economic development–i.e., rectifying an inequitable distribution of property rights in land, the discrimination against women, and social evils like child-labour and bonded-labour, etc.

In other words, it is in the nature of the process of development that it cannot be left entirely to the invisible hand–which is not to say that it can be entirely entrusted to the visible hand of the state. The fact is that both these models–unbridled capitalism and overbearing *etatisme*–have been proven by history to be unnatural. Contrary to popular impressions, the demise of communism in our own time was preceded by the interring of unrestrained capitalism in the 1930s. We have learnt the hard way that a democratic "mixed economy" in which private initiative is allowed to flower within a framework of checks and balances instituted by the government–which must also produce an ample supply of *public* goods, without which the *private* goods owned by the individuals cannot be fully enjoyed by them–is close enough to being a Law of Nature.

Looked at in this way, an uncritical acceptance of the "liberal revolution" of the 1970s, extolling the virtues of world capitalism, is inconsistent with development economics. By the same token, the neo-classical vision of universal market-clearing, leaving no room for involuntary unemployment, is definitely irrelevant to development policy. A high level of unemployment, condoned by hard monetarism, cannot be accepted either–for the reason that it may be helping capitalist accumulation or macro-economic stability. And equally inconsistent with development economics are market outcomes which deprive development policy of a proper attitude towards the least privileged members of the society–especially those who cannot participate in market processes due to illness, old age, etc.

These considerations focus our minds on the need for development economics to go beyond strict positivism and unabashed liberalism to acquire an adequate ethical vision of the consequentialist type. Narrowly perceived, such a vision is required "as a resource-saving way of keeping the free riders in check in the provision of public goods of all kinds" [Srinivasan (1988)]–and, if I may add, in the provision of private goods also, which it makes freely available to all members of the society. But an ethical vision need not be narrowly restricted to scare away the free-riders; it should instead provide a system of values which makes the individuals act voluntarily in the interest of the society–and to be concerned about the poverty and misery that afflicts the majority of mankind.

Development economics is nothing if it is divested of a social conscience. By its very nature, our discipline must address the sordidness of a socio-economic environment that stultifies creative initiative. It must also prescribe remedial action to change such an environment so that "full complements of riches", conditionally promised by our father Adam Smith, can be garnered from economic development and an equitable distribution of these riches can be arranged to maximise the social and economic well-being of the people.

REFERENCES

Ahluwalia, Montek S. (1976) Inequality, Poverty, and Development. *Journal of Development Economics* 6: 307–342.

Ahmed, E., and N. Stern (1989) Taxation for Developing Countries. In H. B. Chenery and T. N. Srinivasan (eds) *A Handbook of Development Economics* (Vol II). Amsterdam: North-Holland. 1005–1092.

Arrow, K. J. (1963) Uncertainty and the Welfare Economics of Medical Care. *American Economic Review* 53:5 941–73.

Arrow, K. J. (1973) Higher Education as a Filter. *Journal of Public Economics* 2:3 193–216.

Atkinson, A. B. (1991) Poverty. In John Eatwell, Murry Milgate and Peter Newman (eds) *The World of Economics*. (The New Palgrave.) London: Macmillan.

Atkinson, A. B., and J. E. Stiglitz (1972) The Structure of Indirect Taxation and Economic Efficiency. *Journal of Public Economics* 1: 97–119.

Bacha, E., and L. Taylor (1976) The Unequalizing Spiral. A First Growth Model for Belindia. *The Quarterly Journal of Economics* 90:2 197–218.

Bardhan, Paranab (1988) Alternative Approaches to Development Economics. In H. B. Chenery and T. N. Srinivasan (eds) *A Handbook of Development Economics* (Vol I). Amsterdam: North-Holland. 39–71.

Becker, Gary S. (1960) An Economic Analysis of Fertility. *Demographic and Economic Change in Developed Countries*. Princeton: Princeton University Press. (Universities-National Bureau of Conference Series No. 11.)

Becker, Gary S. (1962) Investment in Human Capital: A Theoretical Analysis. *The Journal of Political Economy* 70:5 (Part 2) 9–49.

Becker, Gary S. (1964) *Human Capital*. New York: National Bureau of Economic Research.

Becker, Gary S. (1983) A Theory of Competition among Pressure Groups for Political Influence. *The Quarterly Journal of Economics* 97:3 371–400.

Behrman, Jere, and Anil Deololikar (1988) Health and Nutrition. In H. B. Chenery and T. N. Srinivasan (eds) *A Handbook of Development Economics* (Vol. I). Amsterdam: North-Holland. 631–711.

Behrman, Jere, and B. N. Wolfe (1984) A More General Approach to Fertility Determination in a Developing Country: The Importance of Biological Supply Consideration, Endogenous Tastes, and Unperceived Jointress. *Economica* 51:203 319–39.

Bell, Clive (1990) Development Economics. In John Eatwell, Murry Milgate and Peter Newman (eds) *Economic Development*. (The New Palgrave.) London: Macmillan. 818–826.

Bhagwati, Jagdish N. (1968) *The Theory and Practice of Commercial Policy: Departures from Unified Exchange Rate*. New Jersey: Princeton University Press.

Bhagwati, Jagdish N. (1987) Directly-Unproductive-Profit-seeking Activities. In J. Eatwell, Murry Milgate and Peter Newman (eds) *Economic Development*. (The New Palgrave.) London: Macmillan. 845–847.

Bhagwati, J. N. (1988) Export-Promoting Trade Strategy: Issues and Evidence. *The World Bank Research Observer* 13:1.

Birdsall, Nancy (1988) Economic Approaches to Population Growth. In Hollis B. Chenery and T. N. Srinivasan (eds) *A Handbook of Development Economics* (Vol. I). Amsterdam: North-Holland. 477–542.

Brunner, K. (1968) The Role of Money and Monetary Policy. *Federal Reserve Bank of St. Louis Monthly Review* 50: July 8–24.

Chelliah, R. J., and R. N. Lal (1978) *Incidence of Indirect Taxation in Developing Countries, 1973-74*. New Delhi: National Institute of Public Finance and Policy.

Chenery, H. B., and T. N. Srinivasan (eds) (1988) *A Handbook of Development Economics* (Vol. I). Amsterdam: North-Holland.

Clark, C. (1940) *The Conditions of Economic Progress*. London: Macmillan.

Coale, A. J. (1984) The Demographic Transition. *The Pakistan Development Review* 23:4 531–552.

Coale, A. J. (1989) Demographic Transition. In John Eatwell, Murry Milgate and Peter Newman (eds) *Social Economics*. (The New Palgrave.) London: Macmillan.

Coase, Ronald (1960) The Problems of Social Costs. *Journal of Law and Economics* 3: 1–44.

Coleman, James S. (1989) Equality. In John Eatwell, Murry Milgate and Peter Newman (eds) *Social Economics*. (The New Palgrave.) London: Macmillan.

Cropper, M. L., and W. E. Oates (1992) Environmental Economics: A Survey. *Journal of Economic Literature* 30:2 675–740.

Debreu, G. (1959) The Theory of Value: An Axiomatic Analysis of Economic Equilibrium. New York: Wiley. (Cowles Foundation Monograph No. 17.)

Denison, E. F. (1967) *Why Growth Rates Differ: Post-War Experience in Nine Western Countries*. Washington, D. C.: Brookings Institution.

Diamond, P., and J. A. Mirrlees (1971) Optimal Taxation and Public Production: Production and Efficiency and Tax Rules. I and II. *The American Economic Review* 61: 1 and 3 8–27 and 261–278.

Easterlin, Richard A. (1989) Fertility. In John Eatwell, Murry Milgate and Peter Newman (eds) *Social Economics*. (The New Palgrave.) London: Macmillan.

Eatwell, John (1991) Import Substitution and Export-led Growth. In John Eatwell, Murry Milgate and Peter Newman (eds) *The World of Economics*. (The New Palgrave.) London: Macmillan.

Economist (London) (1992) Zero Inflation. How Low is Low Enough? 7–13 November. 21–24.

Eshag, Eprime (1990) Fiscal and Monetary Policies in Developing Countries. In John Eatwell, Murry Milgate and Peter Newman (eds) *Economic Development*. (The New Palgrave.) London: Macmillan.

Etienne, Gilbert (1992) Employment and Wages in Rural India: The Fight against Poverty and the Economic Reforms. (Mimeographed.)

Feldstein, M. S. (1967) *Economic Analysis for Health Service Efficiency*. Amsterdam: North-Holland.

Fisher, A. G. B. (1935) *The Clash of Progress and Security*. London: Macmillan.

Friedman, Milton (1960) *A Programme for Monetary Stability*. New York: Fordham University Press.

Fuchs, Victor R. (1987) Health Economics. In the New Palgrave Dictionary of

Economics. John Eatwell, Murry Milgate and Peter Newman. (Vol. II.) London: Macmillan.

Galenson, Walter, and Harvey Leibenstein (1955) Investment Criteria, Productivity, and Economic Development. *The Quarterly Journal of Economics* 69:3 343–370.

Gillis, D. H. Perkins, M. R. Roemer and D. R. Snodgrass (1983) *Economics of Development.* New York: Norton.

Goode, R. (1984) *Government Finance in Developing Countries.* Washington, D. C.: The Brookings Institution.

Hirschman, Albert (1981) The Rise and Decline of Development Economics. In Albert Hirschman (eds) *Essays on Trespassing: Economics of Politics and Beyond.* Cambridge: Cambridge University Press.

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

HDR (1990) *Human Development Report.* New York: Oxford University Press [for UNDP].

Jazairy, I., M. Alamgir and T. Panuccio (1992) *The Sate of World Rural Poverty.* New York: New York University Press. [Published for International Fund for Agricultural Development (IFAD).]

Johnson, H. G. (1964) Optimal Trade Intervention in the Presence of Domestic Distortion (Ch. 1). In Caves, Johnson and Kenen (eds) *Trade Growth and Balance of Payment.* Chicago: McNally and Company.

Kaldor, Nicholas (1955) Alternative Theories of Distribution. *Review of Economic Studies* 23.

Kelley, Allen C. (1988) Economic Consequences of Population Change in the Third World. *The Journal of Economic Literature* 26:4 1685–1728.

Kendrick, J. (1976) *The Formation and Stocks of Human Capital.* New York: National Bureau of Economic Research.

Klein, Lawrence R. (1983) *The Economics of Supply and Demand.* Oxford: Basil Blackwell.

Klein, Lawrence R. (1991) Financial Options for Economic Development. *The Pakistan Development Review* 30:4 369–380.

Krueger, Anne O. (1974) The Political Economy of the Rent-seeking Society. *The American Economic Review* 64:3 291–303.

Krueger, Anne O. (1978) *Liberalization Attempts and Consequences.* Cambridge, Mass: Ballinger.

Kuznets, S. (1955) Economic Growth and Income Inequality. *American Economic Review* 55:1 1–28.

Kuznets, S. (1966) *Modern Economic Growth.* New Haven: Yale University Press.

Leibenstein, Harvey (1957) *Economic Backwardness and Economic Growth.* New York: John Willey & Son.

Leontief, Wassily (1983) Technological Advance, Economic Growth, and the Distribution of Income. *Population and Development Review* 9:3 403–410.

Lewis, W. A. (1954) *Economic Development with Unlimited Supplies of Labour*. Manchester School of Economic and Social Studies 22: 139–191.

Lipsey, R. G. (1968) The Theory of Customs Unions: A General Survey. *Economic Journal* (Vol. 70). Reprinted in R. Caves and H. H. Johnson (eds) *Readings in International Economics.* Homewood, III: Richard D. Irwin Inc.

Malinvaud, E. (1989) Decentralization. In John Eatwell, Murry Milgate and Peter Newman (eds) *Allocation, Information and Markets.* London: Hutchinson.

Mellor, John W. (1986) Agriculture on the Road to Industrialization (Ch. 2). In John P. Lewis and V. Kallab (eds) *Development Strategies Reconsidered.* USA. Transaction Books [for Overseas Development Council].

Mellor, John W., and Bruce F. Johnston (1984) The World Food Equation: Interrelations among Development, Employment and Food Consumption. *Journal of Economic Literature* 22:2 531–574.

Miller, Herman (1960) Annual and Life-time Income in Relation to Education, 1929–1959. *The American Economic Review* 50:5 962–86.

Mincer, Jacob (1974) *Schooling, Experience and Earnings.* New York: National Bureau of Economic Research.

Musgrave, R. A. (1961) *The Theory of Public Finance: A Study of Public Economy.* New York: McGraw Hill.

Musgrave, R. A. (1976) ET, OT and SBT. *Journal of Public Economics* 6:1 and 2 3–16.

Naqvi, Syed Nawab Haider (1969) Protection and Economic Development. *Kyklos.* 22:1 124–154.

Naqvi, Syed Nawab Haider (1971) On Optimizing “Gains” from Pakistan’s Export Bonus Scheme. *Journal of Political Economy* 69:1 114–127.

Naqvi, Syed Nawab Haider, and Ashfaque H. Khan (1989) *Inflation and Growth: An Analysis of Recent Trends in Pakistan.* Islamabad: Pakistan Institute of Development Economics.

Naqvi, Syed Nawab Haider, and A. R. Kemal (1991) *Protectionism and Efficiency in Manufacturing: A Case Study of Pakistan.* San Francisco: ICEG Press.

Naqvi, Syed Nawab Haider (1992) *On Raising the Level of Economic and Social Well-being of the People.* Islamabad: Pakistan Institute of Development Economics.

Naqvi, Syed Nawab Haider, Ashfaque Hasan Khan, Ather Maqsood Ahmed, *et al.* (1992) *The Macro-economic Framework for the Eighth Five-Year Plan.* Islamabad: Pakistan Institute of Development Economics.

Naqvi, Syed Nawab Haider (1993) Development Economics: Meaning, Scope, and Direction. (Forthcoming.)

National Research Council (1986) *Population Growth and Economic Development: Policy Questions.* Working Group on Population Growth and Economic Development, Committee on Population, Commission on Behavioural and Social Sciences and Education. Washington, D. C.: National Academy Press.

Nozick, Robert (1974) *Anarchy, State, and Utopia.* Oxford: Basil Blackwell.

Nurkse Ragnar (1953) *Problems of Capital Formation in Underdeveloped Countries.* New York: Oxford University Press.

Pack, H. (1988) Industrialization and Trade (Ch. 9). In H. B. Chenery and T. N. Srinivasan (eds) *A Handbook of Development Economics* (Vol. I). Amsterdam: North-Holland. 333–380.

Papanek, Gustav F., and Oldrich Kyn (1986) The Effect of Income Distribution on Development, The Growth Rate, and Economic Strategy. *Journal of Development Economics* 23:1 55-56.

Pechman, J. A. (1983) Economics for Policy Making. Cambridge: The MIT Press. (Selected Essays of Arthur M. Okun.)

Please, S. (1971) Mobilizing Internal Resources through Taxation. In R. E. Robinson (ed) *Developing the Third World: Experience of 1960.* Cambridge: Cambridge University Press.

Rawls, John (1971) *A Theory of Justice.* Cambridge: Harvard University Press.

Rosen, Sherwin (1989) Human Capital. In John Eatwell, Murry Milgate and Perter Newman (eds) *Social Economics.* (The New Palgrave.) London: Macmillan 681–690.

Rosenstein-Rodan, P. N. (1943) Problems of Industrialization of Eastern and South-Eastern Europe. *Economic Journal* 53:210 202–11.

Rostow, W. W. (1990) *The Stages of Economic Growth: A Non-Communist Manifesto.* Cambridge: Cambridge University Press.

Ruttan, Vernon W., and Yujiro Hayami (1970). Factor Prices and Technical Change in Agricultural Development: The United States and Japan 1880–1960. *The Journal of Political Economy* 78:5 1115–1141.

Ruttan, Vernon W. (1982) *Agricultural Research Policy.* Minneapolis: University of Minnesota Press.

Sandomo, A. (1976) Optimal Taxation: An Introduction to the Literature. *Journal of Public Economics* 6:1 and 2 36–54.

Schultz, Theodore P. (1981) *Economics of Population.* Reading, MA: Addison-

Wesley Publishing Company.
Schultz, Theodore W. (1962) Reflections on Investment in Man. *The Journal of Political Economy* 70:5 (Part 2) 1–8.
Scitovsky, T. (1985) Economic Development in Taiwan and South Korea: 1965–81. *Food Research Institute Studies* 19:3 215–264.
Sen, Amartya K. (1981) *Poverty and Famines: An Essay on Entitlement and Deprivation.* Oxford: Clarendon Press.
Sen, Amartya K. (1983) Development Economies: Which Way Now? *Economic Journal* 93:372 745–762.
Sen, Amartya K. (1988) The Concept of Development. In H. B. Chenery and T. N. Srinivasan (eds) *A Handbook of Development Economics.* Amsterdam: North-Holland. 10–26.
Spence, Michael A. (1974) *Market Signalling: Informational Transfer in Hiring and Related Screening Processes.* Cambridge: Harvard University Press.
Srinivasan, T. N. (1985) New Classical Political Economy, the State and Economic Development. Lecture to the Asian Development Bank. (Mimeographed.)
Srinivasan, T. N. (1988) Introduction to Part I. In H. B. Chenery and T. N. Srinivasan (eds) *A Handbook of Development Economics.* Amsterdam: North-Holland 3–8.
Summers, Lawrence (1992) Investing in All the People. *The Pakistan Development Review* 31:4 367–404.
Syrquin, Moshe (1988) Patterns of Structural Change. In H. B. Chenery and T. N. Srinivasan (eds) *A Handbook of Development Economics* (Vol. I). Amsterdam: North-Holland 203–273.
Tinbergen, Jan (1977) *Theory of Economic Policy.* Amsterdam: North-Holland.
Tinbergen, Jan (1982) Ways to Socialism. *Coexistence* 19-1.
Tinbergen, Jan (1988) Comments on "A Research Agenda: Panel Discussion on Macro-economic Models". In W. Driehuis, M. M. G. Fase and H. Den Hartog (eds) *Challenges for Macro-economic Modelling.* New York: North-Holland.
WDR (1984) *World Development Report.* New York: Oxford University Press [for the World Bank].
WDR (1991) *World Development Report.* New York: Oxford University Press [for the World Bank].
WDR (1992) *World Development Report.* New York: Oxford University Press [for the World Bank].
World Economic Survey (1992) New York: United Nations.