The economics of development

A review article

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Introduction

A reading of a collection of books on economic development[1] provides one with an opportunity to reflect on some of the main issues and concerns in the field. Development economics emerged as a separate discipline in the mid-twentieth century and its early development was shaped by experiences of the inter-war period as well as experiences of the older industrialized nations, particularly that of Britain, in the course of their industrial development. The great depression of the late 1920s and early 1930s, the massive decline in the volume and value of world trade in the 1930s, the rapid industrialization of Soviet Russia under a command economy, the successful experience of planning in the UK in the course of World War II, all provided the background against which many of the development theories were formulated and policies advocated.

The policies advocated included, importantly, comprehensive central planning by government and industrialization on the basis of import substitution. Underlying many of the policy prescriptions was the belief that agriculture had to provide resources for industrial development and that the relative price of agricultural output had to be kept low for rapid capital accumulation in the industrial sector. There was also in some quarters a fear of neo-colonialism and a desire not to become, if possible, too dependent on ex-colonial powers.

By the mid-1960s, however, it was becoming clear that countries which had switched from import-substituting industrialization (ISI) strategy to export-promoting (EP) strategy were displaying economic performances markedly superior to those of the strongly inward-looking countries. There was also a major expansion in the volume of world trade. At about the same time, it became clear that some states, particularly in Africa, were becoming predatory and that government failure was becoming more important than market failure in many cases. When in the course of the 1970s there occurred a well-publicized overthrow of Keynesianism and a resurgence of neo-classical economics, it was only a short time before there occurred a parallel neo-classical counter-revolution in development theory and policy. Now, with the collapse of command systems in Russia and East European countries, and the emergence, too, of China – for all practical purposes – as a capitalist economy, we have entered an era of stabilization and structural adjustment programmes. Whether all of these imply, in any important sense, "the end of history" (Fukuyama, 1992)[2] is a

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moot point. What this review will argue, however, is that, if it is the relative rise and decline of nations that is the focus of our interest, then history has long to go, irrespective of whether or not there is the attainment of universal liberal democracy (allied to free-market economics).

The article is organized as follows. The second section provides a brief overview of the growth performance of the developing countries over the last 40 years or so. This will act as a backdrop for the discussion in the rest of the article. The third section comments on the relationship between agriculture and industry which is commonly postulated in the literature, and also considers briefly the role of the informal sector in that context. The fourth section considers the relationship between the state, development strategies and international trade. The fifth section reviews some of the concerns which have been voiced regarding non-renewable resources and environmental degradation in the context of growth. The sixth section offers some reflections on changes in the world economy which have been brought about by the transformation of a number of less-developed countries (LDCs) into newly-industrializing countries (NICs) and highlights one of the mechanisms through which the relative rise and decline of nations could take place in the world economy over time. The final section concludes with brief comments on the books which have prompted the reflections in this article.

The growth performance

The growth performance of the developing countries as a group over much of the post-World War II period has been quite favourable compared with that of the developed countries. Indeed, in the decades prior to 1980, the average annual rate of growth for the developing countries as a group actually exceeded that of the high-income countries. However, this has not been the case in the 1980s. In that decade, economic performance quite sharply polarized the developing countries: excellent performance in East and, to a lesser extent, South Asia was in marked contrast with the economic retrogression in sub-Saharan Africa and Latin America. Table I presents some data on average annual growth of GNP per capita over three sub-phases during the period 1965-90.

The relative position of Africa has deteriorated steadily during the last 20 years, with the continent as a whole seeing little growth in the 1970s and declines in output in the 1980s. A host of historical and geographical factors have, of course, put Africa at a special disadvantage. Politically, Latin America and Africa have also been more prone to military *coups d'état*, while Asia has had greater political stability, although often achieved by authoritarian means. Latin America has also relied much more heavily than has either Africa or Asia on foreign sources for its direct investment and has had greater entanglement in the problems of international debt.

Along with favourable growth performance in much of the post-World War II period, there has been significant industrial transformation in the developing countries. For the developing countries as a group, the rate of growth of industrial output in the 1960s and 1970s was more than double that of the developed

	1965-73 (%)	1973-80 (%)	1980-90 (%)
Low- and middle-income countries	4.3	2.6	1.5
Low income	2.4	2.7	4.0
Middle income	5.3	2.4	0.4
Sub-Saharan Africa	1.6	0.6	−1.1
East Asia, the Pacific	5.1	4.8	6.3
South Asia	1.2	1.8	2.9
Latin America, the Caribbean	4.6	2.3	0.5
High-income countries	3.7	2.1	2.4
OECD members	3.7	2.1	2.5
World	2.8	1.3	1.4

Source: adapted from the World Bank's *World Development Report 1992.*

Table I.
Average annual growth of GNP per capita

countries (Table II). While the first generation of the NICs in Asia (Hong Kong, Singapore, South Korea and Taiwan) have outperformed the other developing countries in rates of industrial output and economic growth, rapid industrialization and growth miracles were evident in other developing countries as well. Indeed, some of these countries outperformed the Asian NICs over at least part of the period.

In both the Asian NICs and the second generation of NICs[3], the acceleration of industrial production was closely tied to a rapid expansion in exports of industrial goods, which was often linked to a shift in trade policy from inward- to outward-looking, export-oriented strategies. While over the last decade the pace of industrialization has slowed considerably, nevertheless many developing countries in this period have done better than the industrialized countries. China and India, in particular, have experienced very high rates of industrialization. In sharp contrast, the low-income, primary producing countries, concentrated in sub-Saharan Africa, have experienced little industrialization or growth in the post-World War II period.

	1965-80 (%)	1981-90 (%)
Low-income countries	7.3	8.2
China and India	7.0	10.3
Other	8.0	3.7
Middle-income countries	6.7	2.3
High-income countries	2.7	
OECD countries[a]	3.1	3.3

Note:
[a] Average annual growth rate for manufacturing in the OECD countries
Source: Adapted from the World Bank's *World Development Report 1992* (given in Poulson, 1994, p. 378)

Table II.
Industrial production average annual growth rates

What has happened then over the last 40 years has been neither a succession of economic take-offs nor a growing gap in income between the developed and the developing countries. Instead, there have been some take-offs, mainly in East Asia, and some severe cases of retrogression, mainly in Africa. Thus the polarization that has taken place has done so in the developing world, but not between the developing countries taken as a group and the developed world.

Physical indicators also tell a story that is consistent with that of the group's growth rates. Improvements in health are reflected in reductions in the death rate in all developing countries in 1987 compared with 1965 (with the single exception of Ethiopia). Even for the low-income countries, the death rate has declined significantly and converged with that of the developed countries(Poulson, 1994, p. 15). Although life expectancy is still low in the developing countries, there have been significant improvements, with average increases of about eight years from 1965 to 1987[4]. The empirical evidence also shows significant improvements in levels of schooling in the developing countries. Furthermore, the gap in education between the developing and the developed countries is closing, whether this is measured by the relative levels of schooling or the absolute years of schooling completed; and, as Poulson (1994, p. 248) has noted, "there is little doubt that increased levels of schooling have significantly improved the quality of the labour force in the developing countries".

Agriculture, the informal sector and industrialization

In much of the development literature, the belief is that economic modernization follows a natural process of evolution, with agricultural development coming first and providing the pre-condition for industrial revolution. As is well known, Lewis (1954, 1958) presents a two-sector model to investigate the expansion of the capitalistic or industrial sector as it is nourished by supplies of cheap labour from the subsistence or agricultural sector. Lewis (1954) stressed a labour surplus rather than an agricultural surplus. It would appear, however, that agricultural output also has to increase if the mechanism that he describes is not to grind to a halt. As he wrote:

> if we postulate that the capitalist sector is not producing food, we must either postulate that the subsistence sector is increasing its output, or else conclude that the expansion of the capitalist sector will be brought to an end through adverse terms of trade eating into profits.

It was, however, Ranis and Fei (1961), in their subsequent elaboration and extension of the Lewis model, who clearly brought out the importance of the agricultural surplus in initiating and sustaining the process of capital accumulation in the industrial sector in the context of the dual economy models.

The dual economy models can, thus, be seen to lead to a view of economic development which suggests that agricultural development is in some sense a prerequisite to industrial development and that it is agriculture which must necessarily provide resources for industrialization. This is, of course, a highly respected view with a long tradition, whose root can be traced to Ricardo (1817), and which, in our time, not only underlies the construction of all dual economy

models (Jorgenson, 1967; Lewis, 1954; Nurkse, 1959; Ranis and Fei, 1961), but is also generally thought to be supported by the history of today's industrialized countries, the prime examples cited being England and Japan. Thus it is suggested:

> that both in eighteenth-century England and in Meiji Japan, substantial increase in agricultural output was achieved by modest investments in land improvements, enclosures and rotation of crops. Such an increase provided additional food for the growing population and capital for newly emerging industries. Increased agricultural productivity also released cheap labour for the new industries[5].

These historical ideas, however, have undergone considerable revision in recent years and on the basis of recent research it would appear that, if anything, it is more appropriate to say that it was in fact industrial development which contributed to substantial agricultural development in today's industrialized countries, rather than the other way around. Sinha (1984) provides a succinct summary of the available evidence from which it is fairly obvious that the role of agriculture in both England's and Japan's industrialization has been vastly exaggerated by the earlier historians. A recent estimate, for example, put the annual rate of growth of agricultural output in England between 1760 and 1780 – the period when industrialization really began – at only 0. 10 per cent (Crafts, 1983; Sinha, 1984); Sinha also draws attention to the fact that, from the time industrialization began in earnest until well into the nineteenth century, domestic agricultural production in England failed to keep pace with population growth and "the high rate of growth of agricultural productivity 'which ultimately overcame the Malthusian problem was a nineteenth – and not an eighteenth century – phenomenon'". Similarly, in the Japanese case recent research has shown the earlier estimates of substantial increase in agricultural output during the Meiji period to be implausibly high and has also cast serious doubts on the reliability of the available data as the basis for any firm conclusions regarding increase in agricultural output.

So far as inter-sectoral flow of funds between agriculture and industry is concerned, it now appears highly likely that in both England and Japan, there probably was net inflow of funds towards rather than away from the agricultural sector. Sinha also finds no conclusive evidence that agriculture could and did release cheap labour for the newly emerging industries in England:

> as to the role of agricultural productivity in releasing cheap labour for the new industries, the Japanese case has not been pressed too far since labour employed in agriculture did not show a significant decline until well into the twentieth century (Sinha, 1984, p. 63).

It would thus appear from recent research that the fundamental ideas underlying the construction of dual economy models cannot justifiably claim to derive convincing support from the historical evidence of today's industrialized countries, and there is accordingly room for alternative models of development.

Indeed, in a fundamental sense, the two-sector models would appear to be less than completely equipped to deal with the question of the agriculture-industry relationship; for even at the dawn of history people did not devote all

of their time exclusively to producing food – they also simultaneously produced other goods and services and engaged in other activities. In other words, there always was an informal sector in today's terminology, and any model of development must, therefore, incorporate these people and activities into the analysis in an essential way[6]. Once this is done, one can tell a story clearly quite different from those of the dual economy models, for is it not much more likely that some of these informal activities transform themselves into capitalistic modes of production; that the formal/capitalistic sector for its growth does not have to rely on the rural sector for labour or for additional food; but that, instead, as the formal sector grows, it helps bring about transformation in both the rural and the informal sectors? For a three-sector general equilibrium model of LDC, which systematically incorporates an informal sector, see Bhattacharya (1985, 1994a, 1994b).

The informal sector also, of course, plays important roles in rural-urban migration and in contributing to national output. Rural-urban migration in much of the current development literature is viewed as a problem primarily because, following Todaro (1969) and Harris and Todaro (1970), such migration is thought to contribute to urban unemployment. However, a great deal of the empirical evidence available in recent years would seem to throw doubt on the validity of the Todaro and the Harris-Todaro models (Bhattacharya, 1985; Williamson, 1988), and I have set out non-probabilistic migration functions alternative to those usually employed in the literature (Bhattacharya, 1985, 1994b). In a more general review of the literature, I have noted that there exist a number of powerful arguments for viewing rural-urban migration favourably in contemporary LDCs as well (Bhattacharya, 1993a). I have also argued, on the basis both of theoretical considerations and a study of the dynamics of the informal sector in India (Bhattacharya, 1993b, 1995), that any policy directed towards the informal sector must be formulated in awareness of its dynamic potential. In particular, policies designed to strengthen subcontracting relationships between firms from the formal and informal sector may have much to commend them on grounds of both equity and efficiency.

The state, development strategies and international trade

The role of the state is clearly of some importance in the context of growth. Traditionally, Marxists have regarded the state as an instrument of class domination, and that view continues in much of the neo-Marxist literature. The state, in this view, forms its policies to support, reinforce and promote the strength of the dominant class or classes.

By contrast, the neo-classical school for many years largely ignored issues of political economy. In implementing economic policy, the assumption is that the state is a monolithic decision maker, consistently maximizing social welfare. The 1980s, however, saw the emergence of the new political economy (NPE), which is based on the assumption that, because rulers pursue their own self-interest rationally, they cannot constitute themselves as a benevolent state. The

NPE literature is at an incipient stage and it is too early to say what the lasting impact of this literature will be[7]. There is, however, little doubt that this literature has provided some insight to the source of government failures and to the design and implementation of rules to constrain government. But it is also equally clear, as Lipton (1989) has noted, that what is really required now is more hypothesis-based empirical studies of how specific institutions – from cabinet to extension agencies – recruit, reward, decide and function. Another fruitful area of research would appear to be to examine, in the NPE framework, the influences of foreign interests (especially those of the multinational corporations) in shaping policy decisions. It may be that these influences differ depending on whether the country is following import-substituting industrialization (ISI) or export-promoting (EP) strategy, whether it is exporting primary products or manufactured goods, and so on.

There have also been attempts in recent years by a number of economists to explain differing policy choices in different countries in terms of the political economy of policy change. A question that has been discussed at some length in this context is why, in the NICs of East Asia, a comfortable evolution resulted, by and large, in the linearity of policy change from ISI to EP strategy, while in Latin American countries we have been witness to inconsistency and an oscillatory pattern of policy choices, with market-oriented episodes replaced by a return to ISI policies in a virtually continuous fashion and accompanied by less successful policy outcomes. Ranis and Fei (1988) have attempted to explain the differential performance by pointing to two types of initial conditions, namely, maturity of initial nationalism and the absence or presence of natural resources. In economies which are resource-scarce – so Ranis and Fei argue – there is less rent to be squeezed out of the resource-intensive sectors in the initial phase and outward orientation tends to come more quickly[8]. Bardhan (1988)[9], by contrast, thinks that

> the key issue is not maturity of nationalism (except in a tautological sense), or pragmatism of leadership, or scarcity of natural resources; it is the ability of the state to insulate economic management from the pressures of short-run rent-seeking by powerful interest groups.

Little (1988), on the other hand, has emphasized the role of ideas, and states that

> there is evidence that ideas working through a few key personalities were important in Taiwan, which was the first to see the disadvantages of import-substitution policies and to change.

It is also, of course, clearly possible that, in response to the experience of both the more trade-oriented countries, on the one hand, and the less trade-oriented, on the other, views changed and a number of countries were influenced to follow the examples of the East Asian NICs.

The question, however, of why EP strategy should lead to faster growth – incidentally, the normal sequence, in Germany, Japan and Korea, has involved not trade neutrality but heavily interventionist mercantilism, first promoting import substitutes, then promoting exports – is explicable neither in the strict confines of the formal neo-classical framework (Myint, 1987) nor in terms of

either the Harrod-Domar or neo-classical growth models. In both growth models, a negative balance of trade (i.e. imports growing faster than exports) results in a faster rate of growth of capital. In the Harrod-Domar model, this leads to a higher warranted rate of growth, since the capital-output ratio is fixed. In the neo-classical model, the equilibrium rate of growth remains unchanged, since it is given by the growth of the labour force; however, output-capital ratio declines and this causes a rise in the level of the growth path and in per capita income. Thus, depending on the model employed, the net importing countries are likely to experience a higher rate of growth or higher per capita output. This conclusion, however, ran counter to observations in the 1950s and 1960s, when some of the most rapidly growing countries, such as Italy, Japan and West Germany, showed substantial strength on trade account, while slowly growing countries, such as the UK and USA, had much less favourable trade experiences.

These empirical observations, in turn, led many economists to emphasize the beneficial effects of increased exports on investment, productivity and relative prices and to argue that a country with rapidly expanding exports would grow faster; and, accordingly, a number of models were developed in the early 1960s to analyse such export-led growth (see, among others, Beckerman, 1962; Caves, 1970; Gordon, 1965; Lamfalussy, 1963a, 1963b).

More recently, in the context of the developing countries, technical innovation and a dynamic learning process in response to competitive pressures from abroad have been emphasized. It has also been argued that an export-oriented strategy opens up fewer opportunities for rent-seeking in trade policy. Interest groups, it is claimed, have fewer opportunities to capture pure rents through tariffs and other forms of preferential treatment (Balassa, 1971, 1982; Bhagwati, 1988; Krueger, 1974, 1983; Poulson, 1994).

While there is little doubt that the adoption of the EP strategy has been the path of growth for East Asian NICs, questions have been raised as to whether other developing countries can follow the same path in expanding exports of manufactured goods to the developed countries. Cline (1982), for example, has argued that the success of the Asian NICs in capturing a larger share of the developed countries' market for manufactures will make it more difficult for other developing countries to follow their lead because of rising protectionist sentiments in the developed countries. Recent empirical studies, however, show that, for both the first and the second generation of NICs, the developed countries continue to provide the most rapidly expanding market for their manufacturing exports. Indeed, and as Poulson has noted, in recent years the share of that market captured by the second generation of NICs has in fact increased faster than it had for the first generation of NICs (Poulson, 1994, pp. 421-2; also see Havrylyshyn and Alikhani, 1982; Havrylyshyn and Wolf, 1983; Reidel, 1984). Also one must recognize that, as NICs grow, and as income in these countries increases, they will provide expanding markets for one another and for others. There is already clear evidence that the East Asian NICs have

expanded their imports from the other developing countries, particularly for primary goods.

Growth, resources and the environment

In recent years there have been growing worries in some circles that, if growth and industrialization continue, this would put an unsustainable burden on the environment. There have also been worries about the exhaustion of non-renewable resources. Are these worries justified?

The argument that the world would run out of non-renewable resources is, of course, as old as economics. The world, however, is not running out of non-renewable resources because, as Poulson (1994, p. 307) puts it

> increasing scarcity of these resources is reflected in higher prices. People respond to higher prices for non-renewable resources in rational ways, including the discovery of new reserves, improvements in efficiency, substitution of alternative resources, and technological innovations.

For a lucid discussion of these issues, see Dasgupta (1989). Dasgupta also draws attention to the work of Goeller and Weinberg (1976). *Inter alia*, Goeller and Weinberg argue, on the basis of geological and technological data, that the essential raw materials are effectively in infinite supply. The only fly in the ointment is the supply of hydrocarbons, currently the main source of energy. Adjusting for population growth, the supply of hydrocarbons, according to Goeller and Weinberg, would last only a few hundred years. However, today it is possible to see many sources of unlimited energy: nuclear fusion, solar, geothermal and clean nuclear breeder reactors. As Nordhaus (1974) concluded, from this perspective "there is virtually unlimited energy available".

What of the worries about environmental degradation following continued industrialization by the developing countries? The first point to make in this context is that poverty often is responsible for much environmental degradation and that the protection of the environment is not possible so long as the developing countries remain poor. Expansion of agriculture to marginal lands and gathering of fuel-wood by the poor are two of the major causes of environmental degradation in many developing countries. It is, therefore, necessary both to reduce pressure on marginal lands and to improve economic opportunities through expansion of non-agricultural sources of income. Second, it needs to be recognized that many of the pollutions are not the inevitable consequence of development. They can be controlled, as for example are London and New York, by a Clean Air Act. Third, as Bernstam (1991) has argued persuasively, environmental discharges do not grow proportionately with the level of economic growth. As economies grow, discharges to the environment increase rapidly, then decelerate and eventually decline. Essentially, this is due to the fact that, as market economies mature and grow, they use fewer resources to produce the equivalent level of output and, hence, do less damage to the environment.

Apart from pollution, the other major environmental worry pertains to the greenhouse effect. This holds that the accumulation of carbon dioxide (CO_2) and other major greenhouse gases – methane, nitrous oxide and chlorofluorocarbons – is expected to produce global warming and other significant climatic change over the next century. Analysts of global warming have centred much of their discussion on a key benchmark: the doubling of carbon-dioxide *equivalent* of all trace gases, and defining the climate sensitivity parameter, $\wedge$, as the expected equilibrium mean global warming from a doubling of carbon dioxide equivalent. On the basis of general circulation models (GCMs)[10], the Intergovernmental Panel on Climate Change places $\wedge$ at a lower bound of 1.5°C, a best guess central value of 2.5°C, and an upper bound of 4.5°C[11].

The basis of greenhouse science is many years of theory and computer simulation models. The empirical support to date, however, is almost non-existent – to some extent, the supporters of greenhouse theory would say, inevitably so for reasons of long lags and natural variability. Somewhat more damaging for the greenhouse theory, however, is the fact that the observed temperature increase is less than the GCM simulations predict should have occurred[12].

But what happens if the worst comes to pass and there is a 3°C rise in global mean surface temperature along with the associated changes in climate? Nordhaus (1991), after a careful study, concluded that a climate change of this magnitude is "likely to produce a combination of gains and losses with no strong presumption of substantial net economic damages". If, then, the likely impact from the greenhouse effect is modest, the appropriate response from the developing countries – many of whom, in any case, might benefit from global warming[13] – would appear to be to wait to see if the theory of the greenhouse effect is confirmed by evidence in 30-40 years' time and meanwhile to do nothing which might slow down their growth rates[14]. Instead, the environmental issues that the developing countries should concern themselves with, in my judgement, are those that relate to desertification and pollution. But, of course, given the limited amount of available resources, only a limited number of things can be done, and a priority needs to be determined regarding which environmental issues need to be addressed, when and how seriously. This, however, appears to be a rather neglected field of research, but is clearly of some practical importance[15].

The relative rise and decline of nations

Notwithstanding the poor performance in Africa[16], the set-back in Latin America during the 1980s and the worries about the environment and resources, one can expect to see a larger group of LDCs grow to acquire the status of newly-industrializing countries (NICs) in the coming years. In view of this, an important area of research would appear to be to try to model the effects of the emergence of NICs on the economies of the developed countries (DCs). While there have been some empirical studies designed to examine the impact of NICs' penetration of DC markets, the theoretical studies have been scarcer. One way of

organizing one's thoughts about the impact of NICs would probably be along the lines of the following scenario: we start with a DC which has an efficient sector, the F-sector; it also has a less-efficient sector, the I-sector, which often acts as a subcontractor to the F-sector. Even though knowledge of the most efficient techniques is available to all in this DC, the I-sector does not use the most efficient techniques. This is so for various reasons: it may, for example, be prevented from doing so, directly or indirectly, by the few oligopolies which may dominate the market; there may be the problem of getting rid of the older machines, or the problem of raising finance needed for modernization. Whatever the reasons, the less-efficient sector continues to lag behind.

Into this world now comes a dynamic LDC which borrows the latest know-how to set up its new industries. Initially, these new industries produce goods which are close substitutes for the output of the less-efficient sector in the DC. But, because they adopt the latest techniques, they produce these goods more efficiently than similar goods are produced in the DC. They also pay relatively lower wages. It is, thus, easy to see that, given relatively unrestricted trade, the efficient industries in the DC will now prefer to buy inputs from the LDC rather than from the less-efficient units in the DC.

The losers in the less-efficient sector in the DC, however, are unlikely to accept this state of affairs placidly. They will now put pressure on the political system for compensation, in the form of protection, or of subsidies, or of both; the resulting tension may then hamper the growth of the efficient sector as well. The older a country's industrial structure is, the stronger, *ceteris paribus*, is likely to be the political strength of the inefficient sector and, hence, the greater its ability to extract concessions from the political system. It is difficult to capture all of these different elements in a purely economic model: nevertheless, it would appear necessary to recognize the fact that the declining sector may hamper the growth of the efficient sector as well.

It is, of course, possible that, in response to challenges from the NICs, new industries producing new products may emerge in our DC, and these new industries may then lead to the establishment of new subcontracting firms in the I-sector of our DC. Thus, while old subcontracting firms disappear, new subcontracting firms may appear. However, for these new industries to emerge in our DC, and for new subcontracting firms to follow in their train, the political, economic and social systems in our DC would have to be highly flexible; also there would have to be an abundance of adventurous entrepreneurs in the populace. If these are absent then, even though new industries emerge, new subcontracting firms may not appear, and the new industries may instead subcontract-out to firms in the NICs. All of these considerations provide some clue as to why some countries may be more successful than others in adjusting to challenges from the newly-industrializing countries, and why, in consequence, growth rates may differ between different countries.

Note also that, with some extension of this framework, it would be possible to tell a story of how changes might take place in the world economy over time and

how the relative rise and decline of nations could take place in the world economy. Thus, as some of the LDCs become NICs by borrowing and adapting latest techniques and successfully entering the markets of the DCs, they will, on the one hand, tend to lift up the remaining LDCs by providing or helping to provide cheaper inputs and larger markets, while, on the other hand, they will call for adjustment in DCs, and will slow down the rate of growth of those DCs which are unable to adjust quickly and whose I-sectors cannot meet adequately the challenges of competition from the NICs. Such a story will, of course, need to be qualified in several ways and elaborated in others, and I do not pursue these any further here[17].

The books reviewed

Before concluding this review, it would appear appropriate to offer some comments on the books which have prompted the reflections in this article. Three of the books – (Poulson, 1994; Thirlwall, 1994; Todaro, 1994) – are textbooks . Of the other three, one (Kanth, 1994) is a collection of some of the most influential texts in the field of economic development published over the last 40 years, texts which come from all points of view in the economic and ideological spectrum; another (Singer and Roy, 1993) is a summary of developmental progress over the last 40 years with detailed case studies of two major developing countries, Nigeria and India; the final book (Toye, 1993) is a powerful critique of the neo-classical counter-revolution in the theory and practice of development in the 1980s. If one is permitted to use labels, then broadly one can say of these textbooks that Todaro's book is written from a "structuralist" point of view, Thirlwall's from a "Keynesian" and Poulson's from a "public choice" perspective. Todaro, in my judgement, has let the experience of Africa and Latin America in the 1980s colour his outlook to an excessive degree and does not recognize adequately the growth achieved over the last 40 years nor the prospects for growth, especially in Asian countries. But the book contains useful discussions of a number of topics. In particular, I found the chapters on population and environment particularly good. However, I certainly would recommend my students to consult, say, Williamson (1988) or Poulson (1994) for a more balanced discussion of the issues of unemployment, migration and urbanization than is to be found in either Todaro or Thirlwall; and, though Todaro has a brief discussion of the neo-classical counter-revolution of the 1980s, it is much too perfunctory.

Thirlwall, on the other hand, has no discussion at all of this counter-revolution. Thirlwall also places too much emphasis on demand factors. Nevertheless, his book, too, has good discussions of a number of topics and is undoubtedly one of the better textbooks available for undergraduate students of development economics. It is, however, Poulson's book which wins my vote. Though written from a public choice perspective, Poulson also sets out clearly and without prejudice the positions of other schools on various issues. Nevertheless, students probably should read this book in conjunction with, say, Toye. Toye's book is a powerful critique of many of the NPE positions and is one

of the best of its kind. Of the other two books, Kanth's is a useful reference and his introduction to the collection is both interesting and provocative. Singer and Roy's book, however, is a disappointment. The discussion of the post-World War II development experience in Part I of the book I found rather chatty, while the case studies – and that of India in particular – in Part II, I am afraid, I found rather superficial. Nevertheless, taken together, these books provide a fairly comprehensive picture of the issues and concerns in the field of economic development and show both the strength and vitality of concerns that animate discussions in this field.

Notes

1. The books are Kanth (1994); Poulson (1994); Singer and Roy (1993); Thirlwall (1994); Todaro (1994); and Toye (1993). A review of the books is provided in the final section of the article.
2. Fukuyama's (1992) thesis is not the absurd one that, with the collapse of communism in Soviet Russia and Eastern Europe, time has stopped, or historical events have ceased. "Rather it is that recent events show that certain historical alternatives – socialist central planning and authoritarian government – have become irretrievably discredited. Liberal democracy (allied with free-market economics) is said to be left without any competition, as the only remaining ideology of potentially universal validity". See Toye (1993, pp. 5-17) for a critique of Fukuyama's thesis.
3. The second generation of NICs included, in South-East Asia: Thailand, Indonesia and Malaysia; in Latin America, Mexico and Brazil; and, in the Middle East: Turkey and Israel.
4. Some recent studies, however, would appear to indicate a reversal of these trends in a number of developing countries, with all nine of the sub-Saharan African countries registering a decline in life expectancy during the 1980s.
5. This is Sinha's (1984, p. 59) summing-up of the views of, among others, Deane (1969), Deane and Cole (1969), Habakkuk (1965), Jones (1967).
6. It is true that Lewis has argued repeatedly that the subsistence sector in his two-sector model is not necessarily confined to agriculture and that it also includes such non-agricultural activities as petty trading, domestic services, etc. However, this argument, in our view, obscures the fact, which I have highlighted elsewhere (Bhattacharya, 1985, 1994a), that the structure and the functions of the agricultural and the informal sectors, respectively, are very different from each other and that their effects on the growth of, and employment creation in, the modern industrial sector are fundamentally different. Consequently, we believe that it is inappropriate to group together the agricultural and the informal sectors as one subsistence sector, as Lewis does. In any case, Lewis clearly had in mind countries where land was scarce for, as Little (1982) has noted; "if land was not scarce, it can be presumed (one supposes) that surplus labour would not exist in any sector. It would seem, therefore, that one can tell the Lewis story in terms of the capitalist versus agriculture (as most commentators have done)".
7. For a flavour of this literature see, among others, Buchanan and Tollison (1984); Buchanan *et al.* (1981); Meir (1991). Toye (1993) is a particularly good critique of this literature. See also Poulson (1994) for a good discussion of the relevant issues.
8. The supposed importance of natural resources in the Latin American context has also been emphasized by Findlay (1988).
9. See also Bardhan's (1984) work on India.
10. These are large computer models of the atmosphere, in some cases designed originally for the purposes of current weather forecasting.

11. The sizeable range of $\wedge$ in these GCMs is primarily due to disagreement about whether the induced climate effects provide strictly positive (i.e. enhancing) rather than negative (ameliorating) feedback. See the discussion in Cline (1991).
12. Cline also says that "one explanation of the divergence might be that ocean thermal lag is longer than the principal models suggest".
13. This is suggested by some of these uncertain climate models. See Lal (1990), pp. 31-3.
14. In any case, if global warming does take place, climatic engineering could be resorted to in order to alter the climate if need be; or, equally, measures could be devised to adapt to the warmer climate. See the discussion in Nordhaus (1991, p. 928). Also it may be noted here that, "from the perspective of the overall existence of life on earth, even a 15°C (27°F) temperature change is not threatening. For example, 100 million years ago dinosaurs roamed a planet some 15°C warmer than today, and tropical plant and animal forests have been found in high-latitude locations such as Alaska" (Schneider (1989), quoted by Lal (1990)).
15. The interested reader will note that in the text I have said nothing concerning the question of the ozone depletion. For an excellent critique of the media "hype" on this issue, I draw the reader's attention to Lal (1990). See also Singer (1989), quoted by Lal.
16. Many of the African countries are clearly at a nation-building stage and in need of suitable political and economic institutions to be established.
17. For a very preliminary attempt at modelling along these lines, see Bhattacharya (1985, Ch. VII). It may also be noted in this context that the traditional North-South models do not usually allow for the possibility that the growth of the South may, in certain circumstances, have adverse effects on the growth of the North.

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