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The South in the World Economy: Past, Present and Future

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The object of this paper is to analyze the evolution of developing countries in the world economy situated in its wider historical context, from the onset of the second millennium, but with a focus on the second half of the twentieth century, which sets the stage to consider the rise of the South that is centre-stage at the end of the first decade in the twenty-first century. The structure of the discussion is as follows. Section I examines the changes in the economic importance of Africa, Asia and Latin America (now described as the developing world), as compared with Western Europe, Eastern Europe, North America and Japan (now described as the industrialized world), in a long term historical perspective.[1] It highlights the dominance of the South until about 200 years ago, to trace its decline and fall from 1820 to 1950. Section II considers the changes in the significance of developing countries in the world economy since 1950. It reveals an increase in the share of developing countries not only in world population and income, but also in international trade, international investment, industrial production and manufactured exports, which gathered momentum from 1980. Section III analyzes the factors underlying this apparent rise of the South in the world economy. In doing so, it discusses catch-up in terms of economic growth and industrialization. Section IV disaggregates the impressive performance of the developing world to argue that this rise is associated with unequal participation and uneven development. Indeed, there is a concentration in the process

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[*] This paper draws upon earlier work of the author, in particular, Nayyar (2009)

[1] This distinction between the developing world and the industrialized world, defined in terms of geographical regions, is used in setting out the historical perspective based on the statistics compiled by Maddison (2003). The definition of the developing world is exactly the same throughout the paper. However, in the subsequent discussion on evolution of the world economy since 1950, the industrialized world is constituted by countries in Western Europe, North America, Japan, Australia and New Zealand (the 21countries that were original members of the OECD). The erstwhile centrally planned economies, now transition economies, of Eastern Europe and the former USSR are excluded from the analysis, because the statistics available for these countries are not always complete or consistent in terms of coverage.

which excludes countries and people, so that economic growth has not been transformed into meaningful development that improves the well-being of people. In conclusion, Section V contemplates the future to suggest that the prospects of developing countries in the world economy, as also their ability to sustain this rise, depend upon their capacity to combine economic growth with human development and social progress.

I. LONG TERM HISTORICAL PERSPECTIVE

The division of the world into industrialized countries and developing countries is more recent than is widely believed. It does not go back far in time. A long term historical perspective suggests a distinction between the period before the nineteenth century, when geography divided the world, and the period since the nineteenth century, when the world came to be divided by economics.

Dominance: 1000 to 1700

Table 1, which is based on estimates made by Maddison, presents evidence on the distribution of population and income in the world economy in the years 1000, 1500, 1600 and 1700. The world is divided in terms of geographical regions. The first group is made up of Asia, Africa, and Latin America, while the second group is made up of Western Europe, Eastern Europe, North America, Oceania and Japan.

At the end of the first millennium, in 1000, Asia, Africa and Latin America, taken together, accounted for 82% of world population and 83% of world income.[2] In fact, this overwhelming importance of Asia, Africa and Latin America continued in the second millennium for some time to come. Even five hundred years ago, in 1500, they accounted for about 75% of both world population and world income. Two centuries later, in 1700, their share in world population remained almost the same at three-fourths but their share in world income declined to two-thirds. In this context, it is worth noting that such dominance was attributable, in large part, to just two countries.

[2] The dominance of these three continents was similar, somewhat greater earlier. And, 2000 years ago, in 1 AD, they accounted for 84 per cent of both world population and world income (Maddison, 2003, p.261).

During the period from 1000 to 1700, China and India, taken together, accounted for 50% of world population and 50% of world income.

It is no surprise that Western Europe, Eastern Europe, North America, Oceania and Japan, even taken together, were far less important in world economy. Their share in world population increased from less than one-fifth in 1000 to about one-fourth in 1500 and in 1700. Over the same period, their share in world income rose from one-sixth in 1000 to one-fourth in 1500 and one-third in 1700. It would seem that the second half of the second millennium witnessed the beginnings of change. This was, in part, attributable to the first phase of European colonial expansion in the late fifteenth century, in the Caribbean and the Americas. It began with Spain and Portugal, followed by England and France.[3] The slave trade from Africa, the search for gold and silver in the new world, the colonization of the Americas, and the rise of the Asian entrepot trade, were a part of this process which unleashed a somewhat different phase in the formation of the world economy from the early sixteenth century to the late eighteenth century.[4] It was the age of mercantilism in Europe. The share of Western Europe in world income registered a discernible increase. This period also witnessed the beginnings of a division of labour between primary producers and manufacturers but the organization of production was essentially pre-capitalist. It was the onset of the industrial revolution, at the end of this era, which introduced the possibilities of a structural transformation in the world economy.

Decline and Fall: 1820 to 1950

The nineteenth century witnessed the evolution of an international economic order which led to a profound change in the balance of economic and political power in the world. The division of the world into rich industrialized countries and poor developing countries was an outcome of this process. It was attributable to three developments. The first was the industrial revolution in Britain during the late eighteenth century which spread to Western Europe during the first half of the nineteenth century. The second was the emergence of a newer, somewhat different, form of colonialism in the early 1800s which culminated in the advent of imperialism

[3] For a succinct analysis of the rise of these countries during that era, see Kindleberger (1996). See also, Reinert (2007).
[4] For a lucid discussion on the evolution of the world economy during this period, see Findlay and O'Rourke (2007).

that gathered momentum through the nineteenth century. The third was the revolution in transport and communication in the mid-nineteenth century, manifest in the railway, the telegraph and the steamship.

These three developments, which overlapped and partly coincided in time, transformed the world economy by creating patterns of specialization in production associated with a division of labour through trade reinforced by the politics of imperialism. There are competing explanations for this outcome. Some emphasize economic factors to argue that an industrial revolution was dependent on a prior or simultaneous agricultural revolution.[5] Some emphasize political factors to argue that imperial powers did not allow industrialization in their colonies.[6] Some emphasize a mix of economic and political factors to argue that the economics of colonialism and the politics of imperialism together created this international economic order.[7] It would mean too much of a digression to enter into a discussion of these competing explanations. Suffice it to say that the outcome was unambiguous. The world economy was divided into countries (mostly with temperate climates) that industrialized and exported manufactures and countries (mostly with tropical climates) that did not industrialize and exported primary commodities. Slowly but surely, countries in Asia, Africa and Latin America became dependent on the industrializing countries in Western Europe not simply for markets and finance but also as their engine for growth.[8] High productivity in the agricultural sector, combined with the technological revolution in the industrial sector, allowed countries in Northwest Europe to industrialize rapidly. In contrast, tropical countries Asia, Africa and Latin America which had large agricultural sectors characterized by low productivity, ended up specializing in, and exporting primary commodities at unfavourable terms of trade. The economic relationship between the two sets of countries was driven and reinforced by the political dominance of Europe. This led to the de-industrialization and under-development in what became the developing world, just as it led to industrialization and development in what became the industrialized

[5] This hypothesis is developed by Lewis (1978).
[6] See, for example, Baran (1957).
[7] This is the essential theme in the structuralist literature on underdevelopment in Latin America. See, for instance, Furtado (1970) and Griffin (1969). See also, Frank (1971).
[8] For an elaboration of this hypothesis, with supporting arguments and evidence, see Lewis (1978).

world.[9] Both outcomes were an integral part of the process of the development of capitalism in the world economy.

It is somewhat difficult to find a turning point in time for this division of the world economy. The process began circa 1820. Its outcome was discernible by 1870. And the process continued until 1950. This emerges clearly from Table 2 which presents evidence on the share of developing countries and industrialized countries in world population and world GDP for selected benchmark years during the nineteenth and twentieth centuries. Between 1820 and 1950, the share of developing countries in world population declined from three-fourths to two-thirds, but their share in world income witnessed a much more pronounced decline from 63% to 27%. Between 1820 and 1950, the share of industrialized countries in world population rose from one-fourth to one-third, while their share in world income almost doubled from 37% to 73%. This transformation of the world economy may have spanned 130 years. But a new international economic order was clearly discernible at the end of fifty years. By 1870, the share of developing countries in world population had already decreased to two-thirds while that of industrialized countries had already increased to one-third. And, by 1870, the share of developing countries in world income had fallen to 43% while that of industrialized countries had risen to 57%.

For the world economy, the significance of 1870 is clear. The balance of power had shifted. The division of labour had changed. The beginning of a divide between industrialized countries and developing countries in the world economy was visible. It is no surprise that, between 1820 and 1950, there was a sharp increase in the asymmetries between the shares of the two sets of countries in world population and world income.

It may, however, be misleading to consider developing countries as an aggregate. Some disaggregation is necessary because there were significant differences between different regions of the developing world. The increase in disproportionality was particularly pronounced in Asia. Between 1820 and 1950, its share in world population diminished from 65% to 51% but its share in world income dropped from

[9] There is an extensive literature on this subject concerned with the historical origins of underdevelopment. See, for example, Baran (1957), Griffin (1969), Furtado (1970) and Frank (1971).

56% to 15%. For Africa, the shares in world population and income were relatively stable, although the latter was consistently lower. For Latin America, the shares in world population and income were symmetrical throughout the period from 1820 to 1950. What is more, both shares rose over the period under consideration. And, in 1950, Latin America's share in world income was higher than in world population.

It is clear that Latin America was the exception in the developing world. The explanation may not be obvious. But it is worth noting that during the nineteenth century, when countries in Asia and Africa were beginning to be colonized, countries in Latin America were beginning to attain independence. This process of independence from colonial rule in Latin America started in 1810 but was consolidated only in the 1820s. For this reason, perhaps, there was a slight increase, rather than a decline, in Latin America's share of world GDP between 1820 and 1870. The period thereafter witnessed the rise of Latin America as its share in world GDP more than trebled from 2.5% in 1870 to 7.8% in 1950. Indeed, it would seem that Latin America was the success story of the developing world during the period from 1870 to 1950. In sharp contrast, Asia was the disaster story. The economic decline of Asia, which began in 1820, continued apace thereafter as its share in world GDP dropped by more than half from 36.1% in 1870 to 15.4% in 1950.

Given the changes in shares in world population and world income, it is not surprising that the divergence in income per capita, between developing countries and industrialized countries, increased rapidly. This is confirmed by the evidence in Table 3. Between 1820 and 1950, as a percentage of GDP per capita in Western Europe, North America and Oceania, taken together, GDP per capita in Latin America, dropped from three-fifths to two-fifths, in Africa from one-third to one-seventh and in Asia from one-half to one-tenth. Clearly, there was a widening of the gap in per capita incomes between the developing world and the industrialized world. This divergence was modest in Latin America, massive in Asia and somewhere in the middle for Africa. This great divergence was not confined to developing countries alone but extended to Eastern Europe and Japan. It would seem that, over these 130 years, Western Europe and North America pulled away from the rest of the world. The factors underlying this transformation in the world economy are considered later in the paper.

In sum, the evolution of the world economy during this era was shaped by two sets of factors. The first set, which exercised a strong influence over the period from 1820 to 1870, was made up of the industrial revolution in Britain which spread to Europe, the emergence of colonialism which spread to Asia and Africa, and the revolution in transport and communication which shrank the world.[10] The second set, which exercised a strong influence over the period from 1870 to 1914, was made up of the politics of imperialism and the economics of globalization, which created winners and losers. [11] The influence of these factors possibly waned over the period from 1914 to 1950, interspersed as it was by the two World Wars and the Great Depression, but the inherent logic and essential characteristics of industrial capitalism meant that uneven development for unequal partners persisted in the world economy.[12]

II. DEVELOPING COUNTRIES IN THE WORLD ECONOMY SINCE 1950

For developing countries in the world economy, 1950 was perhaps the next turning point. It was the beginning of the post-colonial era as the newly independent countries in Asia and Africa sought to catch up in terms of industrialization and development. This is discernible from the evidence presented in Table 2 on the share of developing countries in world population and world income, which suggests that, during the second half of the twentieth century, two phases are distinguishable: 1950 to 1973 and 1973 to 2001.

In the period from 1950 to 1973, the share of developing countries in world population rose from 67% to 72.5% while their share in world income stopped its decline and rose modestly from 27% to 28.5%. There was a corresponding decline in the share of industrialized countries in world population and world income. It is worth noting that this was the golden age of capitalism, associated with rapid economic growth in the industrialized countries.[13] But economic growth was somewhat faster in the developing countries. The share of Asia in world population rose more than its

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[10] See Lewis (1978), Bairoch (1993) and Findlay and O'Rourke (2007).

[11] See Hobsbawm (1987), Rodrik (1997), Williamson (2002), and Nayyar (2006).
[12] For a discussion on developing countries during this period, see Bairoch (1975)
[13] See Marglin and Schor (1990).

share in world income, so that the asymmetry persisted. The share of Africa in world population rose a little while its share in world income fell a little. The share of Latin America in world population and in world income registered a discernible increase and these shares were roughly symmetrical. However, given the rapid growth in population in the developing world, divergence in income per capita increased everywhere, significantly in Africa and Latin America but only a little in Asia. Between 1950 and 1973, as a percentage of GDP per capita in Western Europe, North America and Oceania, taken together, GDP per capita in Latin America dropped from 39.8% to 33.7%, in Africa from 14.2% to 10.5% and in Asia from 10.1% to 9.2%.

In the period from 1973 to 2001, the share of industrialized countries in world population dropped from 27.5% to 20.6% while their share in world income dropped from 71.5% to 57.5%. There was a corresponding increase in the share of developing countries in world population and world income. Asia's share in world population increased from 54.6% to 57.4 while its share in world income increased from 16.4% to 30.9%. Africa's share in world population rose from 10% to 13.4% while its share in world income decreased from 3.4 to 3.3%. Latin America's share in world population rose from 7.9% to 8.6% while its share in world income fell from 8.7% to 8.3% but these shares remained close to each other. For Africa and Latin America, the divergence in per capita income from that in industrialized countries continued to increase but for Asia this divergence, though still large, diminished. Between 1973 and 2001, as a percentage of GDP per capita in Western Europe, North America and Oceania, taken together, GDP per capita in Latin America dropped from 33.7% to 25.5%, in Africa from 10.5% to 6.5%, but in Asia it rose from 9.2% to 14.3%.

It would seem that Latin America was the exception in the developing world during the period from 1870 to 1950 and it continued to be an exception until 1973. It fell behind the industrialized world but at slower rate than Asia and Africa. However, Asia was the exception after 1950. It would seem that its economic decline stopped during the period from 1950 to 1973. And its catch-up with the industrialized world accelerated in pace during the period from 1973 to 2001.

The preceding discussion on the significance of developing countries in the world economy since 1950, in terms of population, income and per capita income, is based

on estimates made by Maddison. The estimates presented here relate to three selected benchmark years in a time span of five decades. What is more, the focus is on percentage shares in world population or world income and on proportional divergence or convergence in per capita income. The percentages and proportions, in turn, are derived from data on income in 1990 international Geary-Khamis dollars, which are purchasing power parities, more sophisticated than the usual, that facilitate inter-country comparisons over time. This exercise is conducive to a study of long-term trends, particularly if the object is to compare the 50 years since 1950 with the preceding 130 years.

Population

A perspective on changes in population, particularly during the second half of the twentieth century, also requires some reference to absolute magnitudes. Table 4 presents evidence on the share of developing countries in world population, at quinquennial intervals, during the period from 1950 to 2010. It shows that the size of the population in the developing world, made up of countries in Asia, Africa and Latin America, increased from 1.7 billion in 1950 to 3.4 billion in 1980 and 5.7 billion in 2010. This was attributable, in large part, to demographic factors, as death rates dropped but birth rates did not. It also shows that the shares of developing countries in world population increased from two-thirds in 1950 to three-fourths in 1980 and more than four-fifths in 2000. This was attributable to the rapid population growth in developing countries and the stable population in industrialized countries. It would seem that the share of developing countries in world population in 1980 returned to its level during the period from 1500 to 1820. And, by 2010, this share returned to its level in 1000. In the developing world, this population growth was concentrated in Asia and Africa. As in the past, China and India were once again home to a large proportion of world population, but there were several other countries in Asia and Africa with large and rapidly growing populations. It is worth nothing that, in 2010, China and India together accounted for about 36% of world population as compared with a share that was much larger at 50% in 1000 and 57% in 1820.

Output and Income

For an analysis of trends in GDP and GDP per capita since 1950, it is also necessary and appropriate to consider evidence at market exchange rates rather than just

purchasing power parities. Computation of GDP per capita in terms of PPP may be helpful for international comparisons of relative standards of living. But it is not quite correct to add up GDP in terms of PPP across countries, to estimate shares in world GDP in terms of PPP, because these estimates are based on an artificial upward adjustment in the price of non-traded goods and services in developing countries.[14] This leads to an upward bias in the PPP-GDP estimates for developing countries, which are thus not comparable with other macroeconomic variables such foreign trade, international investment or industrial production valued at market prices.

It is worth noting that the share of developing countries in world GDP at current prices and at market exchange rates increased from 17.5% in 1970 to 20.8% in 2000 and 30.7% in 2010.[15] Of course, these trends are significantly influenced by differences in inflation rates and movements in exchange rates. In order to resolve the problem arising from different inflation rates, Table 5 presents available evidence on GDP and GDP per capita in developing countries (in Asia, Africa and Latin America), as compared with the industrialized countries (made up of North America, Western Europe, Japan, Australia and New Zealand) and the world economy, at constant prices, over the period 1970 to 2010. It shows that, at constant 2000 prices, GDP in developing countries as a proportion of world GDP increased from 14.7% in 1970 to 25.4% in 2010. But the table tells a different story about per capita income. It shows that GDP per capita in developing countries as a proportion of that in industrialized countries, at constant 2000 prices, remained almost unchanged in the range of 5% between 1970 and 2000 but it rose to 5.9% in 2005 and 7.5% in 2010. It would seem that divergence in per capita income came to a stop during the last quarter of the twentieth century. However, convergence did not quite begin for the developing world as a whole until the turn of the century, although a few countries in Asia witnessed a significant catch-up in terms of per capita income starting somewhat earlier.

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[14] In principle, this could be a problem for the Maddison estimates used in the preceding discussion. In fact, it is not, as the Maddison-Geary-Khamis approach is a more sophisticated exercise in international comparisons than the conventional PPP measures and is suitable for a study of long term trends. For a more detailed discussion, see Nayyar (2009).

[15] These percentages are calculated from data on GDP at current market prices reported in World Bank, (2011).

The focus on population and income, while instructive, is not sufficient. It is also necessary to consider the engagement of developing countries with the world economy. The obvious channels of engagement are international trade and international investment. In addition, it is important to consider whether or not developing countries met with success in their quest for a catch-up in industrialization. This should be reflected in the share of developing countries in industrial production and manufactured exports in the world economy. The discussion that follows considers these aspects in turn.

International Trade

International trade is, perhaps, the most important form of engagement with the world economy. Table 6 presents evidence on the share of developing countries in world trade at five-year intervals during the period from 1970 to 2010. It shows that the share of developing countries in world exports increased from 14.4% in 1970 to 19.7% in 1990, 29.7% in 2000 and 42% in 2010. The share of developing countries in world imports also increased from 14.1% in 1970 to 18.9% in 1990, 26.6% in 2000 and 38.9% in 2010. It is worth noting that the significance of developing countries in world trade, as sources of imports and markets for exports, more than doubled between 1990 and 2010. It is also interesting to note that in 1970 the share of developing countries in world exports and imports was roughly commensurate with their share of world GDP, but by 2010 their share in world exports and imports was significantly higher than their share of world GDP. A comparison with the past is worthwhile. The share of developing countries in world merchandise exports at current prices rose from 14.4% in 1870 to 19.6% in 1913.[16] Thus, the share of developing countries in world trade in 1970 was about the same as it was in 1870, but by 2010 it was double what it was in 1913.

International Investment

The picture of international investment is somewhat different. Table 7 sets out evidence on foreign direct investment, inward and outward, as also stocks and flows

[16] These percentages have been calculated from data on the value of merchandise exports, in US$ million in current prices at current exchange rates, for a sample of 56 countries reported in Maddison (1995), pp.234-235. This sample includes 28 developing countries (7 in Latin America, 11 in Asia, 10 in Africa) and 28 industrialized countries (17 in Western Europe, 2 in North America, 7 in Eastern Europe and 2 in Oceania). Based on data in this sample, the share of developing countries in world merchandise exports at current prices was almost unchanged at 20.4 per cent in 1950.

in developing countries, industrialized countries and the world. Between 1990 and 2010, the share of developing countries in the inward stock of foreign direct investment in the world increased from about one-fourth to almost one-third. Over the same period, the share of developing countries in inward flows of foreign direct investment in the world was in the range of one-third. Between 1990 and 2010, the share of developing countries in the outward stock of foreign direct investment in the world increased from less than one-fourteenth to more than one-seventh. Over the same period, the share of developing countries in outward flows of foreign direct investment in the world was in the range of one-tenth to one-sixth.

Some comparisons with the past are interesting. In 1900, foreign investment in developing countries, direct and portfolio together, was the equivalent of about one-third the GDP of developing countries.[17] And, in 2000, foreign direct investment in developing countries was about 30% of the GDP of developing countries.[18] In 1914, foreign investment in developing countries, direct and portfolio, taken together, was $179 billion at 1980 prices. And, in 1980, foreign direct investment in developing countries was $96 billion at 1980 prices.[19] In real terms, it reached its 1914 level in the mid-1990s. It would seem that, for developing countries, the significance of foreign investment at the end of the twentieth century was about the same as it was at the end of the nineteenth century.[20] There is, however, one important difference. In the 2000s, developing countries are an increasingly significant source of foreign direct investment in the world economy and this is an altogether new phenomenon.[21]

Industrial Production

It is difficult to find time series evidence on industrial production in developing countries and in the world economy since 1950. And there are problems that arise from the comparability of data over time. Table 8 puts together evidence on the share

[17] It has been estimated by Maddison (1989) that, at 1980 prices, in 1900, the stock of foreign capital in developing countries was $108.3 billion (p.30), while the GDP of 15 selected developing countries in Asia and Latin America was $333.8 billion (p.113).
[18] UNCTAD, *World Investment Report*, 2002, p.329. It is worth noting that this proportion rose sharply in the late 1990s, as it was much less at 10.2 per cent in 1980 and 13 per cent in 1990.
[19] The estimate of the stock of foreign capital in developing countries in 1914, at 1980 prices, is obtained from Maddison (1989), p.30, while the figure for the stock of foreign direct investment in developing countries in 1980 is obtained from UNCTAD, *World Investment Report*, 1993, p.248.
[20] For evidence and analysis in support of this proposition, see Nayyar (2006).
[21] For a detailed discussion, see UNCTAD (2006). See also Nayyar (2008).

of developing countries in manufacturing value added in the world economy at five-year intervals over the period from 1975 to 2010.[22] It is made up of two time series, which are not strictly comparable because of index number problems, but some overlap between the series makes it easier to interpret the trends. During the period 1975-1990, the share of developing countries in world manufacturing value added, at 1980 constant prices, registered a modest increase from 12.6% to 15.3%. During the period 1990-2010, the share of developing countries in world manufacturing value added, at 2000 prices, doubled from 16% to more than 32%, much of it beginning in the mid-1990s.

Some comparison with the past is instructive. The share of developing countries in world industrial output was 60.5% in 1830.[23] Industrialization in Western Europe, and somewhat later in the United States, led to a dramatic transformation in the situation. The share of developing countries in world industrial production dropped sharply from 36.6% in 1860 to 11% in 1900 and 7.5% in 1913.[24] It would seem that the developing world, particularly Asia, experienced a dramatic de-industrialization over the period from 1830 to 1913. In fact, the share of developing countries in world industrial production stayed in the range of 7-8%, its 1913 level, until around 1970.[25]

Manufactured Exports

This catch-up in industrialization was reflected in the emergence of developing countries as important sources of manufactured exports. Table 9 presents evidence on the share of developing countries in manufactured exports in the world economy at five-year intervals during the period 1975 to 2010. During the period 1975-1990, the share of developing countries in world manufactured exports multiplied by more than 2.5 from 6.8% in 1975 to 17.8% in 1990. During the period 1990-2010, the share of developing countries in world manufactured exports continued to increase rapidly and more than doubled from 17.8% in 1990 to 36.5% in 2010.

It is worth noting that the share of developing countries in world manufacturing value added was higher than their share in world manufactured exports until around 1980.

[22] Manufacturing value added reported in this table is estimated in accordance with the national accounting concept, which represents the contribution of the manufacturing sector to gross domestic product.

[23] These shares are estimated by, and reported in, Bairoch (1982), p. 275.

[24] See Bairoch (1982), p. 275.

[25] For supporting evidence, see Nayyar (2009), p.21.

These two shares were roughly similar through the 1980s. Beginning in the 1990s, however, the share of developing countries in world manufactured exports progressively exceeded their share in world manufacturing value added.

III. THE UNDERLYING FACTORS

The changes in the significance of any subset of countries in the world economy over time depend upon their performance, in terms of economic growth, as compared with the rest of the world. Table 10 presents evidence on growth rates in GDP and GDP per capita, in the world economy, by regions, in a long term historical perspective. These growth rates are based on the Maddison estimates of GDP and GDP per capita, in 1990 international Geary-Khamis dollars, for the selected periods. The progressive, indeed rapid, decline in the relative importance of developing countries in the world economy over the period from 1820 to 1950 is easily explained in terms of slow growth in GDP as compared with Western Europe, North America, Eastern Europe and Japan. The differences in the relative importance of regions within the developing world that surfaced over time can also be explained in terms of differences in growth performance. During the period from 1820 to 1950, the dramatic decline in the share of Asia in world income was attributable to the much slower GDP growth as compared with every other part of the world. The relatively stable share of Africa in world income was attributable to respectable GDP growth rates that were not significantly lower than elsewhere in the world, whereas the sharp increase in Latin America's share in world income was attributable to GDP growth rates that were much higher than any other part of the world.

The divergence or convergence in per capita income between groups of countries that emerged over time, and was highlighted earlier in the paper, is clearly reflected in differences in growth rates of GDP per capita. In the period from 1820 to 1950, there was a great divergence in per capita income between Western Europe and North America on the one hand and Asia on the other, but this divergence was much less in Latin America as also Africa. The divergence in per capita incomes between Western

Europe and Asia is striking. Even if it is tautological, the widening productivity gap was the essential underlying factor. There was sustained productivity growth with industrialization in Western Europe and a steady productivity decline with de-industrialization in Asia. The rise of Western Europe and the decline of Asia is an important theme in the historical literature on the subject.[26] Some possible explanations deserve mention, even if it is not possible to enter into a detailed discussion here.

Evidence available suggest that, *circa* 1750, life expectancy, consumption levels and product markets in these two parts of the world were similar and living standards of people were not far apart.[27] What is more, at that time, the advanced regions of Europe and Asia were similar rather than different with economies that were sophisticated. It has been argued that the great divergence between Europe and Asia, during the nineteenth century, was attributable to the fortunate location of coal, which substituted for timber, and trade with the Americas that allowed Western Europe to grow along resource-intensive and labour-saving paths, while Asia hit a *cul-de-sac*.[28] There is another hypothesis which suggests that, during the eighteenth century, high wages combined with cheap capital and energy in Britain, as compared with Asia, as also other countries in Europe, meant that the technologies of the industrial revolution, whether the steam engine or the spinning jenny, were profitable to invent and to use in Britain, while the substitution of coal for wood as a source of energy made an enormous difference.[29] These arguments do not, indeed cannot, provide a complete explanation, for the basic causes were manifold and complex. The search for coal might have been driven by shortages of wood which followed deforestation at home. The search for new technologies might have been driven by competition from Asian manufactures, whether cotton textiles from India or porcelains and silks from China. In both Europe an Asia, events were shaped by the complex influence of economic, social and political factors in the national context.[30] The global economy

[26] For an extensive discussion, see Frank (1998), Pomeranz (2000) and Allen (2009). For an analysis in the wider context of the world economy, see Kindleberger (1996) and Findlay and O'Rourke (2007).
[27] For a discussion, with supporting evidence, see Pomeranz (2000).
[28] This argument is the essential theme in Pomeranz (2000).
[29] This hypothesis is developed in Allen (2009).
[30] For a discussion, see Kindleberger (1996).

also exercised an important influence.[31] In addition, British military successes overseas played a significant role, while the origins of the industrial revolution were closely connected with international trade and overseas expansion.[32]

The economic growth in Britain was, in important part, also attributable to the organization of production in the capitalist system, based on a division of labour associated with capital accumulation and technical progress, which was strongly supported by State policies. Countries in Western Europe followed a similar path a little later. But this did not happen in Asia. The process of industrialization in Britain and Northwest Europe led to an increase in the share of the manufacturing sector and a decrease in the share of the agricultural sector in output and employment. Over time, the outcome was a structural transformation in the composition of output and employment. International migration, which moved people from land-scarce Europe to land-abundant America, supported the process.[33] The movement of labour from employment in agriculture to manufacturing, in turn, led to sustained increases in productivity. The process of industrialization was also supported by State intervention through tariff protection and industrial policies.[34] The access to resources from colonies in the Americas and elsewhere was just one part of the story.

For the period since 1950, complete time series data on GDP are available from national accounts statistics. And evidence available suggests that 1980 was the turning point in terms of economic growth, when there was a discernible break in the trend almost everywhere in the world economy.[35] Thus, Table 11 presents evidence on growth rates in GDP and GDP per capita for regions within the developing world, the developing countries, the industrialized countries and the world economy, during the periods 1951-1980 and 1981-2005. It is worth noting that time-series data on GDP and GDP per capita for the entire period from 1951 to 2005 are not available from a single source. The figures for the period 1951-1980 are based on the Maddison data, as United Nations data are not available before 1971. The figures for the period 1981–2005 are based on United Nations data. These two sources are not strictly comparable.

[31] It has been argued by Allen (2009) that the British Industrial Revolution was a successful response to the global economy of the eighteenth century.

[32] For a discussion on the international context in which the industrial revolution happened in Britain, rather than elsewhere in Europe or in Asia, see Findlay and O'Rourke (2007).

[33] For a detailed discussion, see Nayyar (2002 and 2008a).

[34] For a lucid and persuasive exposition of this hypothesis, see Chang (2002).

[35] This proposition is set out, with supporting evidence, in Nayyar (2008b). See also, Amsden (2007).

However, it is possible to resolve the problem, as data are available from both sources for the period 1981-2000. To facilitate a comparison, Table 11 also presents figures on growth rates during 1981–2000, computed separately from Maddison data and United Nations data. A comparison of the two sets of growth rates during the period 1981–2000, for which both sources are available, shows that the numbers correspond closely, Thus, it is reasonable to infer that the growth rates for the periods 1951–80 and 1981–2005, even if computed from different sources, are comparable.

The arrest of the decline in the relative importance of developing countries in the world economy, during the period 1951-1980, is easily explained in terms of GDP growth rates that were somewhat higher than GDP growth rates in industrialized countries. And the significant increase in the importance of developing countries since 1980 is clearly attributable to GDP growth rates that were higher than in industrialized countries. It would seem that economic growth in all regions in the developing world during the period 1951-1980 was impressive and much better than it was during the period 1820-1950. The divergence within the developing world began thereafter. The modest recovery in Asia's share of world income after 1950, followed by its rapid rise since 1980, was attributable to much higher GDP growth rates than elsewhere in the world. Economic growth in Latin America during the period 1951-1980 was also comparable with that in industrialized countries so that it increased its share of world income, but its growth performance was distinctly worse after 1980 so that there was some decline in its share of world income. Similarly, Africa experienced a contraction in its share of world income, particularly after 1980, as GDP growth rates were lower than elsewhere in the world.

Economic growth in the developing world during the second half of the twentieth century was not associated with convergence in per capita incomes as compared with the industrialized world. The divergence in per capita incomes persisted. In fact, for Latin America and Africa, this divergence registered a significant increase in the period since 1980. Asia was, perhaps, the exception in so far as the divergence stopped and there was a modest beginning in terms of closing the income gap starting 1980. But it was not quite convergence except in a few countries. This is reflected in the persistent, and for some regions mounting, differences in growth rates of GDP per capita.

The share of developing countries in world manufacturing value added doubled, from 16% to 32% in a short span of twenty years. In terms of simple arithmetic, this was attributable, in part, to the slowdown in growth of industrial production in the industrialized countries and, in part, to the acceleration in growth of industrial production in developing countries. The latter is important and merits attention, although it is beyond the scope of this paper to enter into a detailed discussion about underlying factors. Suffice it to say that the observed outcome is attributable, in important part, to development strategies and economic policies in the post-colonial era which created the initial conditions and laid the essential foundations in countries that were latecomers to industrialization. The much maligned import substitution led strategies of industrialization made a critical contribution in this process of catch-up.[36] Of course, a complete explanation would be far more complex. All the same, it is worth noting that the role of the State was critical in the process. Industrialization was not so much about getting-prices-right, as it was about getting state-intervention-right.[37] Indeed, even in the small East Asian countries, often cited as the success stories, the visible hand of the State was much more in evidence than the invisible hand of the market.[38] It would seem that the degree of openness and the nature of state intervention turned out to be strategic choices in the pursuit of industrialization, which were shaped by the stage of development to begin with and changes in circumstances over time. Apart from an extensive role for governments in these domains, the use of borrowed technologies, an intense process of learning, the creation of managerial capabilities in individuals and technological capabilities in firms, the nurturing of entrepreneurs and firms in different types of business enterprises, were the major factors underlying this catch-up in industrialization.[39] The creation of initial conditions was followed by a period of learning to industrialize so that outcomes in industrialization surfaced with a time-lag. Clearly, it was not the magic of markets that produced a sudden spurt in industrialization.[40] Indeed, experience suggests that

[36] See, for example, Helleiner (1992), Rodrik (1992) and Nayyar (1997).
[37] There is and extensive literature on the subject. See, for instance, Stiglitz (1989). Shapiro and Taylor(1990), Bhaduri and Nayyar (1996), and Lall(1997).
[38] This proposition, developed at some length, by Amsden (1989), Wade (1991) and Chang (1996), is now widely accepted.
[39] For a complete and convincing exposition of this argument, see Amsden (2001). See also, Dahlman, Ross-Larson and Westphal (1987), Lall (1990) and Chang (2002).
[40] In this context, it is important to note that much the same can be said about the now industrialized countries, where industrial protection and state intervention were just as important, at earlier stages of

success at industrialization was about creating initial conditions in terms of education, infrastructure, capabilities and institutions, managing strategic integration rather than opting for a passive insertion into the world economy, and recognizing the specificities of economies in time and space.[41]

The share of developing countries in world manufactured exports also rose rapidly from 6.8% in 1975 to 17.8% in 1990 and 36.5% in 2010. It is worth noting that their share in world manufacturing value added was higher than their share in world manufactured exports until around 1980. These two shares were roughly similar through the 1980s. Beginning in the 1990s, however, the share of developing countries in world manufactured exports progressively exceeded their share in world manufacturing value added.[42] It is plausible to suggest that there were two sets of factors underlying these trends which were inter-connected but sequential in time. First, for developing countries, external markets became increasingly important in the process of industrialization. It began with Brazil and Mexico in Latin America in the mid 1960s, where rapid export growth did not continue beyond the late 1970s. But export expansion continued, indeed gathered momentum, with the East Asian success stories: Korea, Hong Kong, Taiwan and Singapore. The small South-east Asian economies, Malaysia and Thailand, followed in their footsteps. And it was not long before China and India, the mega economies in Asia, also sought access to external markets.[43] Second, as globalization gathered momentum in the late twentieth century, there was a progressive integration of developing countries into the world economy, particularly in the sphere of international trade. It began with transnational corporations from industrialized countries sourcing imports of labour-intensive manufactured goods from selected developing countries by relocating production or through sub-contracting.[44] In time, this provided opportunities for domestic firms in developing countries which had created the initial conditions for industrialization to

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their development when they were latecomers to industrialization. This argument, supported by strong evidence, is set out with admirable clarity by Chang (2002). Reinert (2007) develops a similar hypothesis.

[41] For a more detailed discussion, see Nayyar (2008b).

[42] For time series evidence on these trends, see Nayyar (2009).

[43] It is worth noting that export performance in China beginning 1979, India beginning 1980 and in Brazil beginning 1964 but only until 1980, was roughly comparable with that in Japan beginning 1960 and Korea beginning 1965 (Nayyar, 2010).

[44] For a detailed discussion on this issue, see Nayyar (1978).

manufacture for the world market in collaboration or competition with transnational corporations.

IV. UNEQUAL PARTICIPATION AND UNEVEN DEVELOPMENT

It is important to recognize that aggregates for the developing world may be deceptive. The observed increase in the share of developing countries in world output, international trade and manufacturing production, during the second half of the twentieth century, may create the impression of widespread development. This is misleading as much of the catch-up is concentrated in a few developing countries: China, Hong Kong, India, Indonesia, Korea, Malaysia, Singapore and Thailand in Asia; Argentina, Brazil and Mexico in Latin America; and South Africa in Africa. This group of twelve countries is diverse in terms of size and history. The process of catch-up is also not uniform across these countries in terms of its start or speed. Yet, their overwhelming importance in the developing world is clear enough. And this grouping is not significantly different from the grouping of late-industrializing countries, which began an impressive catch-up with 'the West' during the second half of the twentieth century, described as 'the Rest' by Alice Amsden.[45]

The overwhelming importance of these 12 countries in the developing world is striking.[46] Between 1970 and 2005, their share in the total GDP of developing countries increased from 62% to 68%, although their share in the total population of developing countries decreased from 66% to 60%. Over the same period, their share in total exports from developing countries more than doubled from 33% to 73%, their share in total imports of developing countries rose from 41% to 74%, while their share of foreign exchange reserves held by developing countries increased from 41% to 76%. Between 1980 and 2005, their share in manufacturing value added in the

[45] The group of twelve late-industrializing economies studied by Amsden (2001) is made up of Argentina, Brazil, Chile, Mexico, China, India, Indonesia, Malaysia, South Korea, Taiwan, Thailand and Turkey. The grouping in this paper, in comparison, includes Hong Kong, Singapore and South Africa but excludes Chile, Taiwan and Turkey. Taiwan is not included simply because United Nations statistics do not provide information on Taiwan which is reported as a Province of China. Hong Kong and Singapore are included because they were such an integral part of the East Asian miracle, while South Africa is included as the largest and most industrialized economy in Africa. Both groupings include two sets of countries: "the integrationists" (Mexico, Hong Kong and Singapore) characterized by a heavy reliance on foreign direct investment and minimal local R&D, and "the independents" (China, India, Korea and Brazil) which developed national firms and technological capabilities

[46] For a further discussion, as also for the evidence cited in this paragraph, see Nayyar (2009).

developing world rose from 70% to 86% while their share in manufactured exports from the developing world rose from 78% to 88%. During the same period, their share in the stock of foreign direct investment in the developing world, both inward and outward, was in the range of two-thirds to three-fourths. In effect, therefore, much of the catch-up in industrialization and development is concentrated in a dozen countries, where economic growth was associated with a structural change in the composition of output and employment even if it did not lead to an improvement in the living conditions of most people in these countries.[47]

The obvious determinants of such concentration are size, growth and history. In terms of size, the selected countries, except Hong Kong, Singapore, both city states, and Malaysia, are large in population, area and income as compared with most countries in the developing world. In the sphere of growth, all the Asian countries in this group experienced high rates of economic growth, even if the step-up in growth rates started at somewhat different points of time, for Korea, Hong Kong, Singapore, or Malaysia and Thailand, or China and India, as compared with most countries in the developing world. In the realm of history, about half of these countries, in particular China and India but also Argentina, Brazil, Mexico and South Africa, have always been dominant in their respective regions of the developing world and have also been significant in the wider context of the world economy. Therefore, it is essential to recognize that such concentration is not new. It is another matter that Brazil and Mexico were success stories before 1980 while China and India were success stories after 1980. But it is worth noting that the Asian countries in the group, which had created the requisite initial conditions, did also capture the benefits from the process of globalization during the last quarter of the twentieth century, in much the same way as a few latecomers to industrialization, in particular the United States, captured the benefits from the process of globalization during the last quarter of the nineteenth

[47] This hypothesis is developed, at some length, by Ocampo, Rada and Taylor (2009). The authors attempt to explain divergences in growth and development over the past fifty years between countries that are latecomers to industrialization. The focus is on links between economic structure, policy and growth. The concept of economic structure refers to the composition of production activities, the associated patterns of specialization in international trade, the technological capabilities of the economy, the educational level of the labour force, the structure of ownership, the nature of essential State institutions and the development of (or constraints on) markets, which, taken together, can either constrain policy choice or widen policy choice. This approach is used to explain why some countries succeeded in their pursuit of development but there was a much larger number that did not. United Nations (2006) also attempts a similar analysis of divergences in growth and development.

century.[48] In contrast, Argentina benefited from the process of globalization during the period from 1870 to 1914, while Brazil and Mexico were the success stories of import-substitution-based and state-led industrialization during the period from 1950 to 1980. In either case, unlike Asia, Latin America, with the possible exception of Chile, did not quite benefit from the process of globalization since 1980.

The growth performance of the developing world during the second half of the twentieth century was impressive in the aggregate, particularly as compared with the preceding 80 years, but it was uneven across countries and regions. Such uneven development had three manifestations. First, there was a widening of the gap between countries in the world. Second, there was an exclusion of countries, or regions within countries, from the process of development. Third, there was an exclusion of people associated with the persistence of widespread poverty in a world with pockets of prosperity.

The period from 1950 to 2010 has witnessed a widening of the gap in income not only between rich and poor countries but also between countries in the developing world.[49] This international inequality was attributable largely to the widening gap between industrialized countries and developing countries. Even so, international inequality between countries in the developing world was significant. What is more, it registered a discernible increase during the second half of the twentieth century. The divergence in per capita incomes between rich countries and most poor countries continued. For a few countries, largely in Asia, the divergence stopped in the early 1970s and a modest convergence began thereafter to gather some momentum in the early 2000s. It is no surprise that this led to a divergence in incomes per capita between countries in the developing world. Such divergence, which is new, is associated with an exclusion of countries, as also regions within countries, from the process of development.

The Least Developed Countries (LDCs) provide a most striking illustration. The number of LDCs doubled from 24 in the early 1970s to 48 in the early 2000s. In 2010, the share of LDCs in world output was less than 1%, but, with 830 million people,

[48] For a further discussion on this proposition, see Nayyar (2006).
[49] This argument is developed, with supporting evidence, elsewhere by the author. See Nayyar (2009). For a comprehensive analysis of trends in international inequality, between countries and among people, see Milanovic (2005).

LDCs accounted for 12% of the world population. [50] In nominal terms, the average GDP per capita in LDCs was one-fifth of that in developing countries and one-fiftieth of that in industrialized countries. Economic development simply did not create social opportunities for most people in LDCs. Evidence available for 2009 provides confirmation.[51] Adult literacy was less than 60% as compared with more than 80% in developing countries. Life expectancy at birth was 56 years as compared with 62 years in developing countries. Infant mortality rates were 78 per 1000 births as compared with 48 per thousand births in developing countries. Gross enrolment ratios in tertiary education were less than 6% as compared with more than 20% in developing countries. The situation in LDCs is distinctly worse than the average in the developing world. It would seem that their exclusion from the process of development is an important factor underlying the international inequality between countries not only in the world as a whole but also within the developing world.

There is a similar exclusion of regions within countries from the process of development. This is not altogether new. But markets and liberalization tend to widen regional disparities because there is a cumulative causation which creates market-driven virtuous circles or vicious circles. Regions that are better endowed with natural resources, physical infrastructure, educated or skilled labour, experience a rapid growth. Like magnets, they attract resources from people elsewhere. In contrast, disadvantaged regions tend to lag behind and become even more disadvantaged. Over time, the gap widens through such cumulative causation. This has happened in most countries that have experienced rapid growth. In Brazil, regional inequalities between the Northeast and the South, in particular Sao Paulo, increased significantly during the period of rapid economic growth. The economic disparities between coastal China in the East and the hinterland in the West are much greater than before. In Indonesia, the economic gap between Java and the other islands is much wider. In India, the regions in the West and the South that already had a distinct economic lead have left regions in the East and the North behind.

[50] The share of LDCs in world GDP and in world population are calculated from the UNCTAD online database on LDCS.
[51] The statistics cited in this paragraph are obtained from UNCTAD (2011).

The exclusion of people from the process of development is a part of the same story. The incidence of poverty in the developing world *circa* 1950 was high. There was a modest reduction in the proportion of the population below the poverty line in most developing countries during the period from 1950 to 1980 but this reduction was nowhere near what was needed to diminish, let alone eradicate poverty. The period since then has witnessed a change for the worse, rather than better, in many parts of the developing world.[52] The incidence of poverty increased in most countries of Latin America, the Caribbean and sub-Saharan Africa during the 1980s and the 1990s. Much of Central Asia experienced a sharp rise in poverty during the 1990s. However, East Asia, South East Asia and South Asia experienced a steady decline in the incidence of poverty during this period. But most of this improvement is accounted for by changes in just two countries, with large populations, China and India.

Between 1981 and 2005, the proportion of people below the poverty line of PPP$1.25 per day dropped from 51.8% to 25.2% of the population whereas the number of the poor dropped from 1.9 billion to 1.4 billion. However, most of this progress was in China and India. In this period, the number of the poor rose in sub-Saharan Africa, Latin America and Central Asia. Yet, the number of people who could not meet basic human needs in terms of food and clothing, let alone water, education and health care, was 1400 million. If the poverty line is drawn at PPP$2 per day, between 1981 and 2005, the number of the poor in the world remained unchanged at 2.5 billion even if their proportion in the total population dropped from 69.2% to 47%. It is worth stressing that the population between the two poverty lines, 1.1 billion people, more than one-fifth the number of people in the developing world, that is vulnerable in times of crisis, because any shock, such as a bad harvest, high inflation or employment cuts, can push them further into poverty. The evidence cited here is based on World Bank estimates.[53] Some argue that these underestimate poverty while a few claim that these overestimate poverty. It would serve little purpose to enter into a discussion on the poverty debate here.[54] For it is clear that more than one-fifth and perhaps almost two-fifths of the world population lives in absolute poverty, depending

[52] See World Commission on the Social Dimension of Globalization (2004) and Nayyar (2006).
[53] See Chen and Ravallion (2008).
[54] There is an extensive literature on the subject. For a succinct discussion of the trends in poverty, and the debate on numbers, see Kaplinsky (2005).

upon the poverty line drawn. These poor people live mostly in the developing world and constitute a significant proportion of its population. And this poverty has persisted at high levels during a period that has witnessed an increase in the share of developing countries in world income.

It would seem that the beginnings of catch-up with the industrialized world are concentrated in just a few countries of the developing world. There is convergence for a few but divergence for the many. But that is not all. The benefits of rapid growth have been distributed in an unequal manner not only across space but also among people. There are islands of prosperity in an ocean of poverty. The essential problem is that rapid economic growth has often not been transformed into meaningful development, which improves the living conditions or ensures the well-being of people, ordinary people. Of course, there are a few countries where rapid growth has led to human development and social progress. But there are a larger number of countries where growth has not quite led to development. And there are a significant number of countries that have experienced neither growth nor development. In the aggregate, evidence available suggests some progress in terms of the human development index, which shows that the gap between rich and poor countries has narrowed by about one-fifth between 1990 and 2010 and by about one-fourth since 1970.[55] It would seem that there is a convergence in the human development index. Some of this convergence may be attributable to the fact that two indicators which make up the index, such as literacy rates or life expectancy, have natural upper bounds. The narrowing of the gap may also be attributable to the base year, or the starting point for the comparison, when levels of human development, particularly in terms of health and literacy, in most poor countries were low. Even so, on the whole, there was progress, although its distribution across countries and between people was unequal. Therefore, it is important to remember that per capita incomes are just arithmetic means while social indicators are mere statistical averages. And neither captures the well-being of the poor. In fact, measures of poverty, ranging from simple to complex, highlight the reality that absolute deprivation, even if it has diminished over time, persists and is widespread. In that domain, we have miles to go.

[55] For a detailed discussion, with supporting evidence, see UNDP (2010).

V. CONTEMPLATING THE FUTURE

In conclusion, is it possible to speculate or hypothesize about the future prospects of developing countries in the world economy? Growth matters because it is cumulative. However, statistical projections based on an extrapolation of the recent past into the distant future, even if these are the fashion of our times, cannot predict outcomes. Such projections highlight the power of compound growth rates, but growth is not simply about arithmetic. In fact, it is about more than economics. And there is nothing automatic about growth. There are underlying factors which suggest a strong potential for growth. But there are also real constraints on future growth. In the ultimate analysis, the constraints can be overcome in a sustainable manner only if economic growth is transformed into meaningful development, such that it improves the well-being of the people. If this happens, it would reinforce the process of growth and development through a cumulative causation. If this does not happen, developing countries will find catch-up difficult and will continue to lag behind the industrialized world.

The economic determinants of potential growth in the developing world are a source of good news. And, in principle, developing countries may be able to attain or sustain high rates of economic growth for some time to come for the following reasons. First, their population size is large, which is a possible source of growth, and their income levels are low, which means that the possibilities of growth are greater. Second, their demographic characteristics, in particular the high proportion of young people in the population, which would mean an increase in their workforce for some time to come, are conducive to growth, provided that developing countries spread education to create capabilities among people. Third, in most developing countries, wages are significantly lower than in the world outside, which is an important source of competitiveness and in manufacturing activities, while there are large reservoirs of surplus which would mean that relatively low wages would continue to be a source of competitiveness for some time. Fourth, the potential for productivity increase is considerable at earlier stages of development at the extensive margin, from almost zero productivity in agriculture to some positive, even if low, productivity in manufacturing or services, followed by a transfer of such labour from low

productivity employment to somewhat higher productivity employment at the intensive margin.

In practice, developing countries may not be able to realize this potential for growth because of constraints that may differ across space or surface over time. It is obvious that there are specific constraints in different countries, whether leaders or laggards. There are also general constraints, common to most developing countries, such as poor infrastructure, underdeveloped institutions, inadequate education, unstable politics and bad governance. In addition, there are possible constraints that may not be discernible so far but may arise from the process of growth such as economic exclusion, social conflict, environmental stress and climate change. And, there are some constraints that may be exogenous to developing countries, such as worsening terms of trade, restricted market access for exports, inadequate sources of external finance, or a crisis in a world economy.

In the pursuit of development, poverty eradication, employment creation and inclusive growth are an imperative. For one, these are constitutive as the essential objectives of development. For another, these are instrumental as the primary means of bringing about development.[56] This is the only sustainable way forward for developing countries because it would enable them to mobilize their most abundant source, people, for the purpose of development. There is a complexity in the process of development. Yet, some initial conditions and some essential foundations are almost obvious. The spread of education in society is an imperative, for it provides the essential foundations of development in countries that are latecomers to industrialization. Similarly, the development of an infrastructure, both physical and social, is an essential part of the initial conditions that must be created in the earlier stages of industrialization. Most important, perhaps, there is a critical role for the State in terms of policies, institutions and governance. Developing countries must endeavour to combine economic growth with human development and social transformation. This requires a creative interaction between the State and the market,

[56] This argument is similar to Amartya Sen's conception of development as freedom, who argues that development is about expanding real freedoms that people enjoy for their economic well-being, social opportunities and political rights. Such freedoms are not just constitutive as the primary ends of development. Such freedoms are also instrumental as the principal means of attaining development. For a lucid analysis, see Sen (1999).

beyond the predominance of the market model in the process of development. And their past could then be a pointer to their future.

References

Allen, Robert C. (2009). *The British Industrial Revolution in Global Perspective*, Cambridge: Cambridge University Press.

Amsden, Alice H. (1989). *Asia's Next Giant: South Korea and Late Industrialization*, New York: Oxford University Press.

Amsden, Alice H. (2001). *The Rise of the Rest: Challenges to the West from Late Industrializing Economies*, New York: Oxford University Press.

Amsden, Alice H. (2007). *Escape from Empire: The Developing World's Journey from Heaven to Hell,* Cambridge: The MIT Press.

Bairoch, Paul (1975). *The Economic Development of the Third World since 1900*, London: Methuen.

Bairoch, Paul (1982). International Industrialization Levels from 1750 to 1980, *Journal of European Economic History*, Vol. 11, pp.269-333.

Bairoch, Paul (1993). *Economics and World History: Myths and Paradoxes*, Chicago: Chicago University Press.

Baran, Paul A. (1957). *The Political Economy of Growth*, New York: Monthly Review Press.

Bhaduri, Amit and Deepak Nayyar (1996). *The Intelligent Person's Guide to Liberalization*, New Delhi: Penguin Books.

Chang, Ha-Joon (1996). *The Political Economy of Industrial Policy,* London: Macmillan.

Chang, Ha-Joon (2002). *Kicking Away the Ladder: Development Strategy in Historical Perspective*, London: Anthem Press.

Chen, Shaohua and Martin Ravallion (2008). The Developing World is Poorer than We Thought, But No Less Successful in the Fight Against Poverty, *Policy Research Working Paper 4703*, August, Washington DC: The World Bank.

Dahlman, Carl, B. Ross-Larson and Larry Westphal (1987). Managing Technological Development: Lessons from Newly Industrializing Countries, *World Development*, Vol. 15, No. 6, pp. 759-775.

Findlay, Ronald and Kevin H. O'Rourke (2007). *Power and Plenty: Trade, War and the World Economy in the Second Millennium***,** Princeton: Princeton University Press.

Frank, Andre Gunder (1971). *Capitalism and Underdevelopment in Latin America*, Harmondsworth: Penguin Books.

Frank, Andre Gunder (1998). *Re-Orient: Global Economy in the Asian Age*, Berkeley: University of California Press.

Furtado, Celso (1970). *Economic Development in Latin America,* Cambridge: Cambridge University Press.

Griffin, Keith (1969). *Underdevelopment in Spanish America*, London: George Allen and Unwin.

Helleiner, Gerald K. (1992). *ed. Trade Policy, Industrialization and Development*, Oxford: Clarendon Press.

Hobsbawm, Eric (1987). *The Age of Empire,* London: Weidenfeld and Nicolson.

Kaplinsky, Raphael (2005). *Globalization, Poverty and Inequality*, Cambridge: Polity Press.

Kindleberger, Charles P. (1996). *World Economic Primacy: 1500-1990*, New York: Oxford University Press.

Lall, Sanjaya (1990). *Building Industrial Competitiveness in Developing Countries*, Paris: OECD Development Centre.

Lall, Sanjaya (1997). Imperfect Markets and Fallible Governments: The Role of the state in Industrial Development, in Deepak Nayyar *ed. Trade and Industrialization*, Delhi: Oxford University Press.

Lewis, W. Arthur (1978). *The Evolution of the International Economic Order*, Princeton: Princeton University Press.

Maddison, Angus (1989). *The World Economy in the Twentieth Century*, Paris: OECD Development Centre.

Maddison, Angus (1995). *Monitoring the World Economy: 1820-1992*, Paris: OECD Development Centre.

Maddison, Angus (2001). *The World Economy: A Millennial Perspective*, Paris: OECD Development Centre.

Maddison, Angus (2003). *The World Economy: Historical Statistics*, Paris: OECD

Marglin, Stephen and Juliet Schor (1990). *eds The Golden Age of Capitalism*, Oxford: Clarendon Press.

Milanovic, Branko (2005) *Worlds Apart: Measuring International and Global Inequality*, Princeton: Princeton University Press.

Nayyar, Deepak (1978). Transnational Corporations and Manufactured Exports from Poor Countries, *Economic Journal*, Vol. 8, No. 1, pp. 59-84.

Nayyar, Deepak (1997). 'Themes in Trade and Industrialization', in Deepak Nayyar *ed. Trade and Industrialization*, Delhi: Oxford University Press.

Nayyar, Deepak (2002). Cross-Border Movements of People, in Deepak Nayyar *ed. Governing Globalization: Issues and Institutions*, Oxford: Oxford University Press.

Nayyar, Deepak (2006). Globalization, History and Development: A Tale of Two Centuries, *Cambridge Journal of Economics*, Vol. 30, No. 1, pp. 137-159.

Nayyar, Deepak (2008). The Internationalization of Firms from India: Investment, Mergers and Acquisitions, *Oxford Development Studies*, Vol. 36, No. 1, pp. 111-131.

Nayyar, Deepak (2008a). International Migration and Economic Development in Joseph Stiglitz and Narcis Serra *eds. The Washington Consensus Reconsidered: Towards a New Global Governance*, Oxford: Oxford University Press.

Nayyar, Deepak (2008b). Learning to Unlearn from Development, *Oxford Development Studies*, Vol. 36, No. 3, pp. 259-280.

Nayyar, Deepak (2009). Developing Countries in the World Economy: The Future in the Past?, *WIDER Annual Lecture 12*, 23 February 2009, Helsinki: UNU-WIDER.

Nayyar, Deepak (2010). China, India, Brazil and South Africa in the World Economy: Engines of Growth? in Amelia Santos-Paulino and Guanghua Wan *eds. Southern Engines of Global Growth*, Oxford: Oxford University Press.

Ocampo, Jose Antonio, Codrina Rada and Lance Taylor (2009). *Economic Structure, Policy and Growth in Developing Countries*, New York: Columbia University Press, forthcoming.

Pomeranz, Kenneth (2000). *The Great Divergence: China, Europe and the Making of the Modern World Economy*, Princeton: Princeton University Press.

Reinert, Erik S. (2007). *How Rich Countries Got Rich…..and Why Poor Countries Stay Poor*, New York: Carroll and Graf.

Rodrik, Dani (1992). Closing the Productivity Gap: Does Trade Liberalization really Help? In G.K. Helleiner *ed. Trade Policy, Liberalization and Development*, Oxford: Clarendon Press.

Rodrik, Dani (1997). *Has Globalization Gone Too Far?* Washington DC: Institute for International Economics.

Shapiro, Helen and Lance Taylor (1990). 'The State and Industrial Strategy', *World Development*, Vol. 18, No. 6, pp. 861-878.

Sen, Amartya (1999). *Development as Freedom*, New York: Alfred E. Knopf.

Stiglitz, Joseph E. (1989). On the Economic Role of the State, in A. Heertje *ed*. *The Economic Role of the State*, Oxford: Basil Blackwell.
UNCTAD (1993). *World Investment Report 1993*, Geneva: United Nations.

UNCTAD (2000). *The Least Developed Countries 2000 Report*, New York and Geneva: United Nations.

UNCTAD (2002). *World Investment Report 2002*, Geneva: United Nations.

UNCTAD (2006). *World Investment Report: FDI from Developing Countries and Transition Economies: Implications for Development*, New York and Geneva: United Nations.

UNDP (2010). *Human Development Report 2010*, New York: United Nations.

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

Williamson, Jeffrey G. (2002). *Winners and Losers over Two Centuries of Globalization*, WIDER Annual Lecture 6, Helsinki: UNU-WIDER.

World Commission on the Social Dimension of Globalization (2004). *A Fair Globalization: Creating Opportunities* for *All*, Geneva: ILO.

World Bank (2011), *World Development Indicators 2011*, Washington DC: World Bank.

Table 1

Distribution of Population and Income in the World Economy: 1000 - 1700

World Population	**1000**	**1500**	**1600**	**1700**
Group I				
Asia	65.6	61.2	64.7	62.1
Africa	12.1	10.6	9.9	10.1
Latin America	4.3	4.0	1.7	2.0
Group Total	*82.0*	*75.8*	*76.3*	*74.2*
Group II				
Western Europe	9.5	13.1	13.3	13.5
Western Offshoots	0.7	0.6	0.4	0.3
Eastern Europe	2.4	3.1	3.0	3.1
Former USSR	2.6	3.9	3.7	4.4
Japan	2.8	3.5	3.3	4.5
Group Total	*18.0*	*24.2*	*23.7*	*25.8*
TOTAL	100.0	100.0	100.0	100.0

World GDP	**1000**	**1500**	**1600**	**1700**
Group I				
Asia	67.6	61.9	62.5	57.7
Africa	11.7	7.8	7.1	6.9
Latin America	3.9	2.9	1.1	1.7
Group Total	*83.3*	*72.5*	*70.7*	*66.3*
Group II				
Western Europe	8.7	17.8	19.8	21.9
Western Offshoots	0.7	0.5	0.3	0.2
Eastern Europe	2.2	2.7	2.8	3.1
Former USSR	2.4	3.4	3.5	4.4
Japan	2.7	3.1	2.9	4.1
Group Total	*16.7*	*27.5*	*29.3*	*33.7*
TOTAL	*100.0*	*100.0*	*100.0*	*100.0*

Source: Nayyar (2009) based on Maddison (2003).

Note: Asia includes China and India, with a regional estimate for other countries in Asia. Western Europe includes Austria, Belgium, Denmark, Finland, Germany, Italy, Netherlands, Norway, Sweden, Switzerland, United Kingdom, Portugal and Spain with a residual estimate for others in the region. Western offshoots include the United States with a residual estimate for others. Latin America includes Mexico with a separate residual estimate for others in the region. Africa includes estimates for selected countries in North Africa, West Africa, East Africa and Southern Africa with residual estimates of others in the sub-region.

Table 2

The Share of Developing Countries in World Population and World GDP

World Population	**1820**	**1870**	**1913**	**1950**	**1973**	**2001**
Africa	7.1	7.1	7.0	9.0	10.0	13.4
Asia	65.2	57.5	51.7	51.4	54.6	57.4
Latin America	2.1	3.2	4.5	6.6	7.9	8.6
Developing Countries	74.4	67.8	63.2	67.0	72.5	79.4
Industrialized Countries	25.6	32.2	36.8	33.0	27.5	20.6
World GDP	**1820**	**1870**	**1913**	**1950**	**1973**	**2001**
Africa	4.5	4.1	2.9	3.8	3.4	3.3
Asia	56.4	36.1	22.3	15.4	16.4	30.9
Latin America	2.2	2.5	4.4	7.8	8.7	8.3
Developing Countries	63.1	42.7	29.6	27.0	28.5	42.5
Industrialized Countries	36.9	57.3	70.4	73.0	71.5	57.5

Source: Nayyar (2009) based on Maddison (2003)

Note: The group of developing countries is made up of Africa, Asia and Latin America. The group of industrialized countries is made up of Western Europe (Andorra, Austria, Belgium, Channel Islands, Denmark, Faeroe Islands, Finland, France, Germany, Gibraltar, , Greece, Greenland, Iceland, Ireland, Isle of Man, Italy, Liechtenstein, Luxembourg, Monaco, Netherlands, Norway, Portugal, Spain, San Marino, Sweden, Switzerland and United Kingdom), Western Offshoots (Australia Canada, New Zealand, and the United States), Eastern Europe (Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Romania, and Yugoslavia), former USSR and Japan.

Table 3

Comparing GDP per Capita: Divergence in GDP per Capita between Industrialized Countries and Developing Countries

Per Capita GDP ratios	***1820***	***1870***	***1913***	***1950***	***1973***	***2001***
Western Europe WesternOffshoots	100	100	100	100	100	100
Eastern Europe	57.6	45.7	42.5	33.5	37.3	26.4
Latin America	57.5	33.2	37.1	39.8	33.7	25.5
Africa	34.9	24.4	16.0	14.2	10.5	6.5
Asia	48.0	26.8	16.5	10.1	9.2	14.3
Japan	55.6	36.0	34.8	30.5	85.5	90.6
China	49.9	25.8	13.8	7.0	6.3	15.7
India	44.3	26.0	16.9	9.8	6.4	8.6

Source: Nayyar (2009) based on Maddison (2003).

Note: Western Europe includes Andorra, Austria, Belgium, Channel Islands, Denmark, Faeroe Islands, Finland, France, Germany, Gibraltar, Greece, Greenland, Iceland, Ireland, Isle of Man, Italy, Liechtenstein, Luxembourg, Monaco, Netherlands, Norway, Portugal, Spain, San Marino, Sweden, Switzerland, United Kingdom. Western Offshoots include Australia Canada, New Zealand, and the United States. Japan's figures are excluded from Asia's figures, but China's and India's figures are included. Eastern Europe excludes former USSR, but includes Albania, Bulgaria, Czechoslovakia, Hungary, Poland, Romania, and Yugoslavia.

Table 4

Share of Developing Countries in World Population: 1950-2010

	Population (in billion)		
Year	World	DCs	*DCs Share (%)*
1950	2.5	1.7	*68.0*
1955	2.8	1.9	*68.9*
1960	3.0	2.1	*69.9*
1965	3.3	2.4	*71.1*
1970	3.7	2.7	*72.8*
1975	4.1	3.0	*74.3*
1980	4.5	3.4	*75.7*
1985	4.9	3.7	*77.0*
1990	5.3	4.1	*78.3*
1995	5.7	4.5	*79.4*
2000	6.1	4.9	*80.5*
2005	6.5	5.3	*81.3*
2010	6.9	5.7	*82.1*

Source: United Nations, Population Division, UNDATA.

Table 5

GDP and GDP per capita in Developing Countries and the World Economy (at constant prices)

Year	Developing Countries GDP	World GDP	GDP of Developing Countries as % of World GDP	Developing Countries Per Capita GDP	Industrialized Countries Per Capita GDP	Per Capita GDP of DCs as % of Per Capita GDP of ICs
1960	1134	7279	15.6	484	9144	5.3
1965	1424	9420	15.1	550	11190	4.9
1970	1792	12153	14.7	628	11660	5.4
1975	2355	14598	16.1	739	13028	5.7
1980	2991	17652	16.9	849	14887	5.7
1985	3435	20275	16.9	883	16468	5.4
1990	4048	24284	16.7	943	18937	5.0
1995	4756	27247	17.5	1019	20088	5.1
2000	5872	32213	18.2	1167	22708	5.1
2005	7646	36926	20.7	1423	24282	5.9
2010	10516	41365	25.4	1840	24635	7.5

Source: World Bank (2011)

Notes: GDP figures are in billions of constant 2000 US dollars.
GDP per capita figures are in constant 2000 US dollars.

Table 6

Share of Developing Countries in World Trade

	Exports (in US $ billion)			Imports (in US $ billion)		
Year	World	DCs	*DCs Share (%)*	World	DCs	*DCs Share (%)*
1970	161.9	23.3	*14.4*	170.2	23.9	*14.1*
1975	801.0	183.2	*22.9*	820.5	165.3	*20.2*
1980	1745.0	426.5	*24.4*	1812.9	355.0	*19.6*
1985	1686.6	360.9	*21.4*	1799.7	355.0	*19.7*
1990	3132.0	617.4	*19.7*	3251.0	613.3	*18.9*
1995	4705.6	1167.6	*24.8*	4763.4	1243.4	*26.1*
2000	6074.2	1803.3	*29.7*	6263.4	1663.0	*26.6*
2005	9864.2	3330.3	*33.8*	10171.6	3006.6	*29.6*
2010	15229.6	6395.6	*42.0*	15262.4	5931.3	*38.9*

Source: Nayyar (2009) based on United Nations, UNCOMTRADE Statistical Database

Note: The data on exports and imports are in current prices at current exchange rates.

Table 7

Foreign Direct Investment in the World Economy: 1990 to 2010
Stocks and Flows (in US $ billion)

	Stocks										Flows(average per annum)							
	Inward					*Outward*					*Inward*				*Outward*			
	1990	*1995*	*2000*	*2005*	*2010*	*1990*	*1995*	*2000*	*2005*	*2010*	*1991-1995*	*1996-2000*	*2001-2005*	*2006-2010*	*1991-1995*	*1996-2000*	*2001-2005*	*2006-2010*
Developing Countries	517	848	1732	2701	5951	146	330	857	1281	3132	78	203	240	549	36	78	84	286
Industrialized Countries	1562	2534	5653	8563	12502	1948	3281	7083	10983	16804	148	604	490	891	222	696	641	1262
World	2081	3393	7446	11539	19141	2094	3616	7962	12416	20408	228	815	750	1521	259	776	735	1597
Developing Countries as a percentage of World total	*24.9*	*25.0*	*23.3*	*23.4*	*31.1*	*6.9*	*9.1*	*10.8*	*10.3*	*15.3*	*34.1*	*24.9*	*32.0*	*36.1*	*13.8*	*10.0*	*11.5*	*17.9*

Source: UNCTAD Foreign Direct Investment Online Database (www://stats.unctad.org/fdi).

Table 8

Share of Developing Countries in World Manufacturing Value Added

Year	**Percentage Share**	
	1980 prices	2000 prices
1975	12.6	…
1980	13.7	…
1985	14.1	…
1990	15.3	16.0
1995	…	19.8
2000	…	20.9
2005	…	25.4
2010	…	32.1

Source: Nayyar (2009) and UNIDO Secretariat.

Note: The percentage figures have been calculated from data on US dollar values at constant prices for each of the series.

Table 9

Share of Developing Countries in World Manufactured Exports

Year	**Share (%)**
1975	6.8
1980	10.6
1985	14.6
1990	17.8
1995	25.2
2000	28.1
2005	33.3
2010	36.5

Source: Nayyar (2009) based on United Nations, UNCOMTRADE database.

Note: Manufactured goods are defined as SITC 5 to 8 less 68. The percentage figures have been calculated from data on US dollar values at current exchange rates.

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Table 10

Growth Rates in the World Economy by Regions: 1820 – 1950
(per cent per annum)

GDP	1820 – 1870	1870 – 1913	1913 – 1950
Asia	0.03	0.94	0.90
Africa	0.52	1.40	2.69
Latin America	1.37	3.48	3.43
Western Europe	1.65	2.10	1.19
Western Offshoots	4.33	3.92	2.81
Eastern Europe	1.36	2.31	1.14
Former USSR	1.61	2.40	2.15
Japan	0.41	2.44	2.21
GDP per capita	**1820 – 1870**	**1870 – 1913**	**1913 – 1950**
Asia	-0.11	0.38	-0.02
Africa	0.12	0.64	1.02
Latin America	0.10	1.81	1.43
Western Europe	0.95	1.32	0.76
Western Offshoots	1.42	1.81	1.55
Eastern Europe	0.63	1.31	0.89
Former USSR	0.63	1.06	1.76
Japan	0.19	1.48	0.89

Source: Nayyar (2009) based on Maddison (2001), Appendix A: 1d 1e, 2d 2e, 3d 3e and 4d 4e

Note: Western Europe includes 16 selected countries. Western Offshoots includes United States, Canada, Australia and New Zealand. Eastern Europe includes 7 selected countries. Asia includes 56 selected countries. Africa includes 57 selected countries. Latin America includes 44 selected countries.

Table 11

Growth Performance of Developing Countries: 1951-1980 and 1981-2005

(per cent per annum)

	Maddison Data 1951-1980	Maddison Data 1981-2000	United Nations Data 1981- 2000	United Nations Data 1981-2005
GDP				
Asia	6.28	4.04	3.90	4.06
Latin America	4.69	2.01	2.09	2.26
Africa	4.12	2.42	2.60	2.97
Developing Countries	4.84	2.65	2.74	3.04
Industrialized Countries	4.40	2.56	2.59	2.50
World	4.77	2.64	2.72	2.95
GDP Per capita				
Asia	2.90	1.61	1.36	1.63
Latin America	2.11	0.15	0.20	0.44
Africa	1.66	-0.17	-0.06	0.39
Developing Countries	2.19	0.39	0.42	0.80
Industrialized Countries	3.50	2.04	2.06	1.96
World	2.40	0.66	0.69	0.99

Source: Nayyar (2008b).

Notes:

(a) The growth rates for each period are computed as geometric means of the annual growth rates in that period.

(b) The Maddison data and the United Nations data on GDP and GDP per capita are not strictly comparable.

(c) The Maddison data on GDP and GDP per capita, which are in 1990 international Geary– Khamis dollars, are purchasing power parities used to evaluate output which are calculated based on a specific method devised to define international prices. This measure facilitates inter-country comparisons.

(d) The United Nations data on GDP and GDP per capita are in constant 1990 US dollars.

(e) The figures in this table for the world economy cover 128 countries, of which 21 are industrialized countries and 107 are developing countries.

(f) Latin America includes the Caribbean.