

CHAPTER FOUR

DEVELOPMENT AND PROSPERITY OVER TIME

“...the extremely scanty information available in 1947 suggested that the long-term rate of growth of real product per head in the past had been of the order of magnitude of 0.5% per year. Most Indian economist at that time were expecting no better for the future – indeed even less if there were to be no substantial capital inflow from abroad. In fact, in spite of all the mistakes that have been made, the pre head growth rate subsequently attained has been about three times the rate then expected.” Colin Clark [1984].

4.1 Introduction

The previous Chapter has provided a static or point-in-time picture of the large differences in economic prosperity that we see across the globe. Poor countries are very clearly identified by the various different measures considered there. The present Chapter focuses on how that picture has been changing both over a long span of time (several centuries) and in the past 50-60 years which is the main focus of this book. The work here is one further step along the road to defining the common platform of concepts and facts that will help the reader to tackle the later materials in the book

The subject is emotive and the statement that “the rich are getting richer and the poor are getting poorer” is the most common cliché about development seen in popular writings (including student essays). More generally, there are frequent references to statistics suggesting that income gaps between rich countries and developing countries are growing ever wider. Some authors view this widening chasm as an almost inevitable feature of the dynamics of global development.

Academic development economists have tended to articulate this issue around the topic of “convergence” – of the income levels of the poorer countries on those of the richer countries. In the period when the neo-classical model held centre stage through the early 1980s, there was a strong theoretical presumption in favour of the idea that convergence was to be expected. Some of the earlier empirical literature such as Baumol (1986)¹ gave support to this presumption. Later empirical analysis, and not least some of the initial ripostes to Baumol such as De Long (1988) on balance has dampened this optimism. Amongst the less academic writers such as journalists, pessimism seems to have been the order of the day for some time. The data in Box 4.1 exemplifies this by summarising materials that occupied the whole of the front page of the UK newspaper *The Independent* on May 31st 2003 on the eve of the G8 Summit in Evian, France in that year.

Box 4.1: Two Worlds – *The Independent* May 31st 2003

<i>Life Expectancy</i>	G8 = 77 years	Africa = 48 years
<i>Access to Clean Water</i>	UK = 100%	DR Congo = 45%
<i>Spending on Health per person</i>	Canada = \$2,534	Mali = \$1
<i>No of People per Doctor</i>	Italy = 169	Malawi = 50,000
<i>People with HIV</i>	Developed World = 1.5 million	Africa = 28 million
<i>No of People having < \$1 income per day</i>	G8 = 0	Africa = 291 million
<i>Deaths under 5 (per 1000)</i>	G8 = 6	Africa = 174
<i>Cars per 1000</i>	USA = 561	Africa = 14
<i>Average Income</i>	Developed World = \$27,854	Africa = \$1,690
<i>Chance of death in Pregnancy</i>	G8 = 1 in 4085	Africa = 1 in 13
<i>G8 subsidies to farmers</i>	\$ 311 billion per annum	G8 aid to Africa = \$13 billion

The reality is somewhat more complex. The contrasts pointed out by *The Independent* are poignant, unacceptable and they also define why actions designed to narrow the gaps ought to be top of any politician’s and economist’s list of priorities. But the suggestion that they implant in the mind of a reader of a world in which progress has not and is not happening is misleading. Almost all of the contrasts shown in the table above would have looked very much worse from the vantage point of 1950 and certainly in any longer term context.

¹ Baumol’s paper is much cited but deeply flawed as it turns out. He investigated a group of sixteen industrial countries over the span of a century and found that the poorest of these at the beginning had generally made up ground on the richer. The main flaw related to the selection of the sixteen countries. Since they were all relatively rich at the end date for the study, they had the resources to put together the data that at the time of his study Baumol needed to undertake the research. Less successful economies that had been poor a century before and remained relatively poor were far less likely to have made such data available. For a fuller explanation see Easterly (2001).

Historically, many countries have seen long periods where their economic fortunes have ebbed only to enjoy resurgence at some later date (this is true of most of Asia excluding Japan from the 1800s until the early 1970s). Really wide gaps in incomes between countries have only been with us for the past 150 years. *Before that almost all of us were pretty seriously poor.* Some of the gaps opened during that relatively modern period have also been closed by the developments of the past 50 years. Some very poor countries, including populous poor countries such as China have achieved impressive economic gains – both in absolute terms and relative to richer country comparators.

This present Chapter:

- explores some alternative definitions of income gaps
- shows how that record is crucially influenced by the use of a PPP measure of income
- examines the long run tendencies of income growth and the different growth records of richer and poorer countries
- reviews some of the main non-income dimensions of “development” and how these too have been evolving over time
- introduces the Millennium Development Goals (MDGs) that have been set by the UN General Assembly to reduce development gaps. Since these goals were articulated by the UN in 2000, they have become increasingly central to the international development effort.

The formal discussion of “convergence” as analysed by academic economists is delayed until Part II. In this Chapter we use a more accessible pedagogical device to emphasise the changing fortunes of different categories of developing and transition countries.

4.2 Interpreting Income Gaps

4.2.1 Absolute dollar gaps mean little

There are **three** main reasons for the serious over-simplifications that conjure up the pessimistic images of ever-widening income chasms between rich and poor countries. First, it is easy to get misled by looking at income gaps measured in *absolute dollar amounts*. Let’s look at just one example. Per capita income in Tanzania in 2002 was \$550 (exchange rate basis) as compared to around \$35,000 in the USA in the same year. The income gap was huge at almost \$34,500 per person. **EVEN IF** Tanzania were to achieve much faster percentage growth rates than the USA in the next few years, it is an unavoidable fact that this *dollar income gap* between the two will widen. Similar propositions would apply to all binary comparisons between today’s rich and poor countries. Box 4.2 sets out the simple mathematics of this proposition and illustrates the widening absolute gap.

Box 4.2: The Algebra of Income Gaps

Define

Y_A = the income level per capita of a rich country A

Y_B = the income level per capita of a poor country B

Assume that country A has an income differential with the poor country B = λ . (i.e. Country A is λ times richer than Country B)

If g_A and g_B are the annual percentage growth rates of the two countries, then after a period of "n" years of growth

$$Y_{A\ t+n} = Y_{A\ t}(1+g_A)^n \quad \text{and} \quad Y_{B\ t+n} = Y_{B\ t}(1+g_B)^n \quad [1]$$

The **relative gap** in incomes (i.e. Y_B/Y_A) can be narrowed merely by the growth rate of country B exceeding that of country A. i.e. $g_B > g_A$

But since $Y_{A\ t} = \lambda (Y_{B\ t})$, it follows from Equation [1] that for the **absolute gap** in incomes to **narrow at all** after "n" years of growth, we must have:

$$(1+g_B)^n > \lambda (1+g_A)^n \quad \text{or}$$

$$g_B > \lambda^{1/n} g_A \quad [2]$$

Example: The initial (2002) incomes of Tanzania and the USA are \$500 and \$35,000 respectively. The income gap is \$34,500 and so the USA is λ (70) times richer than Tanzania.

Even if Tanzania were to grow five times faster than the USA and, for example achieves an impressive 10% per annum growth as against 2% in the USA, *since* $5 < 70$, *the absolute gap in incomes will still widen.*

After 10 years of such growth the Tanzanian income will have risen to \$ 1,297 but the US income will have risen to \$42,665. So in spite of a 160% gain overall in Tanzania (but only a 22 % gain in the USA) the absolute income gap has risen to \$41,368

The more useful alternative is to look at the *relative income gaps*: the income level of the poor country as a *proportion* of that of the rich country. This approach recognises the importance of relatively high growth rates in poor countries and the role that these can play in relieving chronic problems of under-development such as poverty. As the data used for Box 4.2 can tell us, if Tanzania could achieve (say) 10% per capita growth for 10 years while the USA was only growing at 2 percent per annum, then Tanzania's income level per person would rise from 1.4% of the US level in 2001 to 3.0% by 2011. This is *in spite of a widening absolute dollar gap*. (The reader is invited to check that the absolute and relative income gaps move in opposite directions even with a very high growth of incomes in Tanzania - and also try out different and more realistic growth differentials).

In brief, when the starting point is one of staggeringly large income gaps, it is a mathematical impossibility for those gaps to be narrowed *in absolute terms* over a

relatively short period of time such as 10-15 years. But since the narrowing of absolute dollar gaps is not a meaningful or sensible aspiration, it is not useful to focus too hard on the persistence of such gaps. In the example of Tanzania versus the USA, Tanzania would need to grow *70 times faster* than the US in order to narrow the *absolute gap* in their per capita incomes. Even if we use PPP rather than exchange-rate based measure of income it would need to grow 10-12 time faster. This will simply not happen even with the most generous of aid, trade and debt forgiveness policies as advocated for example by the Make Poverty History campaign. (see www.makepovertyhistory.org)

It is far better from a practical viewpoint to focus on the *relative income gaps*. For these to narrow it is necessary only that the per capita growth rate of the poor country *exceeds* that of the rich country. There are some dramatic examples in the past 50 years of very low-income countries narrowing the *relative income gap* with richer countries such as the USA while seeing the absolute amount of the dollar gap get wider. For example in the 1960s, the per capita income of South Korea was only around 3% of the US level. By 2003, it had risen to be 27 % of the US level. This made Korea rich enough in terms of both income and institutions to join the so-called rich man's club of the OECD. Although the absolute income gap with the USA was still more than \$25,000 per person – far higher than in the 1960s – few people would refer to his as evidence of “failure” in the case of Korea.

As we shall see below, in recent years,

- many low-income developing and transition countries have achieved faster GDP growth per capita than rich countries such as the US;
- most have narrowed *relative income gaps*; and so have significantly improved the income and poverty profiles of their populations, but
- these trends have coexisted with widening *absolute income gaps* in almost every case! China is the most important and dramatic example.

These tendencies in general gives us cause to at least shade our pessimism !

4.2.2 Comparisons over time should use PPP measures

The second reason for the widespread pessimism about changes over time in relative income levels is the still-incomplete recognition of the importance of using purchasing power parity (PPP) measures of income rather than the alternative exchange–rate based measures. The case for this was argued in the previous Chapter where it was shown that static point-in-time comparisons significantly understate income *levels* in poor countries if they do not use the PPP approach. It turns out that this is equally true for comparisons over a period of time.

The failure to use a PPP approach suggests that income gaps (comparing the richest 20 countries with the poorest 20) have risen from 30:1 in the 1960s to 78:1 by the mid-1990s². A longer term view using the same indicators show even more drama.

² Source: UNDP, Human Development Report, 1996, Oxford University Press, New York and Oxford, Annual. Also web site at www.undp.org

The 78:1 in the mid-1990s compares with 5:1 in 1900 and a differential of only 2:1 in 1820.

Of course we should be alarmed if relative income gaps have increased by this enormous amount over the past two centuries.

However, if PPP measures of income are used instead, the comparisons between rich and poor come out with a fundamentally different picture. They show first of all that no major region or *group* of developing countries has actually got poorer in terms of absolute GDP levels per capita over *any sustained period of recent time*. Some *individual* poor countries have periods of *negative* GDP growth rates per capita for sustained periods but this is relatively rare and the periods of negative growth for most countries have typically been short. Box 4.3 identifies the main exceptions to this.

Most poor countries and regions of the world have not got poorer during any reasonably long run of their histories.

Second the PPP comparisons show some variability of income differentials over time but this variability is all in the region of 12:1 to 18:1. (Source: the ICP project as discussed in Chapter 2 including, for example, Summers and Heston 1988 and 1991) The trend since the 1950s around these variations is for the relative income gaps of countries containing the majority of the world's poor to *narrow* and not widen.

Box 4.3: Who Actually Got Poorer in the Long Term?

The monumental *Millennial Perspective on the World Economy* by Angus Maddison (Maddison (2002) has enabled us for the first time to see which countries become truly poorer (in terms of PPP per capita GDP) over the longer term. His time series for 124 countries shows that just **two** countries in Latin America and the Caribbean (Cuba and Haiti) were absolutely poorer in 1998 than in 1950. The corresponding number for the whole of Asia was just **one** country (Afghanistan) and for Africa was **ten** countries (Angola, Central African Republic, Chad, Comoros, Djibouti, Liberia, Madagascar, Niger, Sierra Leone, and Somalia). These countries have a combined population of 117 million persons- less than 2% of the world population.

So although poverty is obviously a huge problem for today's world, it has not arisen because countries *in general* are failing to achieve rises in per capita income in the longer term. Most low-income countries have achieved some rises since 1950 although a smaller number sustained positive growth after 1980. The real problem is that many countries additional to the 13 listed here are not growing fast enough to make inroads into their high levels of economic and social distress, or they are distributing the benefits of their growth in ways that perpetuate that distress for many of their people.

In short, the huge and rising income gaps between rich and poor countries that some authors point out, are attributable in large part to the in-built biases associated with the failure to use the PPP approach. Relative prices are again the main part of the explanation. The huge gains in manufacturing productivity are increasingly lowering the cost of the goods that are traded internationally. But there are many other goods and services included in the GDP aggregates of both rich and poor countries that are

less commonly traded but whose relative prices are not falling. Since these other goods and services fail to get reflected in exchange rates, and are very important (as well as relatively cheap) in the poorest countries, the use of exchange-rate based measures of GDP results in serious over-time distortions in apparent growth rate differences. Numerical examples of this are provided below.

4.2.3 It matters which Time Periods are chosen for comparisons.

The third possible reason for widespread pessimism about income gaps between rich and poor countries has to do with the time periods over which we examine those gaps. The vast bulk of published economic time series comparisons cover periods of 1-5 years. The cyclical ups and downs of growth rates and employment levels in the industrial countries are the food and drink of the economic journalists of these countries. Even in debates about development and the situations of poor countries, data is typically more available and more often presented for time periods such as 10-15 years rather than for longer spans of economic history. This is true even of the data provided by large and well-resourced organisations such as the UN and the World Bank. The World Development and the Human Development Reports typically report growth rates for a 10 year period. The problem is that the headlines inspired by developments over such relatively short periods do not necessarily tell us much about the generality of development progress in a longer term perspective. Box 4.4 provides a relatively recent example showing why headlines about shorter term developments need to be interpreted with some care.

Box 4.4: The Lost Decade of the 1990s

The 2003 edition of the UNDP's *Human Development Report (HDR)* noted that 54 countries had seen average income decline in the decade from 1990 to 2001. The headline reporting this (this time in the British Newspaper *The Guardian*) referred in bold to **The Lost Decade**. Major NGO's greeted this news with comments such as "The shocking truth is that the poor are getting poorer" (Action-Aid).

The reality of the decade of the 1990s is that some poor people tragically did get poorer but most did not. Let us look a bit more closely at the countries suffering income declines to show the dangers of generalising too far from the record of a ten year period. 19 of the 54 countries referred to by the *HDR* were from Sub-Saharan Africa. Since these are in the category of poorest countries, they unambiguously justify the rhetoric that "the poor are getting poorer". But the World Bank recognises 43 low-income countries in Africa. So even in the "Lost Decade", 24 of these poor countries actually saw *gains* in income.

The 54 *HDR* countries also includes 4 Middle-Eastern countries namely Saudi Arabia, Kuwait, the United Arab Emirates, and Palestine. Three of these would definitely *not* appear on anyone's list of poor countries. Their short-term loss of income from very high levels of prosperity can scarcely be seen as symptomatic of a broader development crisis. The same is true of Brunei Darussalam that also had a bad decade but is still classified as a high-income country in 2002.

The largest component group in the 54 after Africa are 18 European transition countries including Russia, Ukraine, Bulgaria and Romania. It is very obvious that the decade of the 1990s was a major structural break in their economic histories. Many of these countries have now recovered the income losses associated with the break up of the Soviet Economic system. Although the poverty and social

problems in many of them remain severe, it would be misleading to regard the events of the 1990s as symptomatic of their long run economic situations and prospects.

The same UNDP report for 2003 confirmed that its Human Development Index had declined in the 1990s in only 22 of the 54 countries – in other words that index actually rose in 32 of the 54 countries that suffered income decline. Most of these countries saw rises in their HDI. Similarly, the numbers of people living on incomes of less than \$1 a day declined significantly in the 1990s from 30% to 23%. So was the decade indeed the lost decade? YES - for some people in parts of Africa and Eastern Europe. NO - for the majority of the world's poor!

4.3 The Very Long-Run Perspective

The past two centuries have seen the world as a whole getting many times richer than during any past period of world history. Per capita incomes world-wide were static for many centuries after AD 1000 at an estimated \$435 per capita. This is in 1990 prices. It is a figure equivalent to less than 8 percent of the income that *the world as a whole* achieved by the year 2000 (Maddison (2002)).

But per capita world income rose to around \$670 by 1820 and continued onwards and upward to an average of \$5,700 by the end of the 1990s (also in the prices of 1990). The increase since the early part of the 19th century has been almost 800%. This is a truly staggering figure especially when put into context with the gain of only around 100% estimated for the whole of the long period from BC 1 million until 1820.

Let's put the point even more dramatically. No less than *eight times* more income gains have been achieved in the past 200 years since 1800 than in the *one million* years before that. *It is as though the world had been a slumbering giant for millennia.* Only around 1800 did it emerge from its stupor to recognise and use its huge energy and potential to produce expanding outputs and incomes.

Also after about 1800, the world as a whole accelerated its production of an ever-richer menu of new goods and services that were better and invariably cheaper than those that human beings had put up with previously. Bradford DeLong (2000) has estimated that fully 75% of today's expenditure is on commodities that did not exist prior to 1800. This has led him to suggest that even the huge 800% gain in income per capita to the present day is a serious *under-estimate* of the gains that we have actually achieved. (see Box 4.5 for the reasons). In any event, historians agree that today's *average* level of income is unprecedented in the whole of human history³.

Box 4.5: Why New Commodities Matter

The important influence that new commodities can have on over-time comparisons of income is illustrated by this little thought experiment. Readers are asked to do a rough estimate of their current annual income levels and to think about how well-off (or otherwise) this makes them feel. Then do a rough

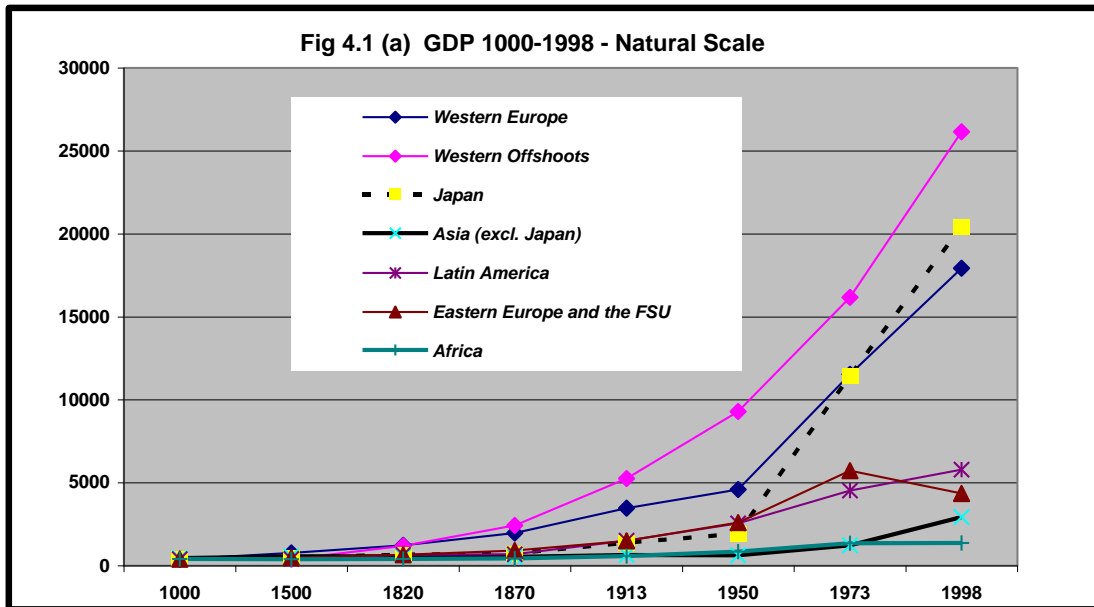
³ Source Bradford DeLong [2000].

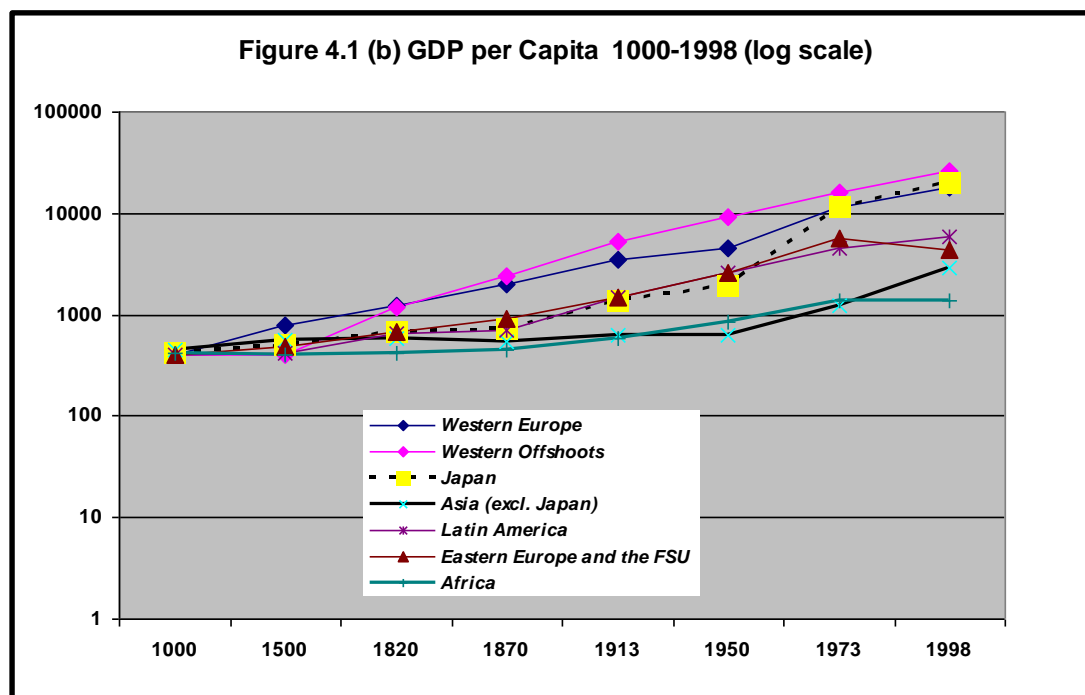
breakdown by category of how that income is spent concentrating on the tangible commodities such as food, drink, gasoline, consumer durables etc. Next take 75% of these expenditures (you choose which ones). Then try to imagine commodity by commodity what you might replace them with if you were spending the same income two centuries ago but only on the commodities THEN AVAILABLE. This is hard to do but remember that some commodities did not exist then (no cars, no electrical equipment, no designer joggers or jeans, no canned music); nor did modern materials (no plastics or artificial fibres) and nor did modern manufacturing techniques (it took a lot of time to make a shirt and so they were quite expensive).

Do you feel better or worse off with your 1800 expenditure pattern?

The dating and geographical location of these changes from near stagnation (the slumbering giant) to positive growth is significant. The first really big global spurt to growth was in Western Europe and was associated with the great advances in technology emerging from the industrial revolution of the late 1700s. Those technological changes made possible large income gains. They also led in time to significant improvements in health (for example, successful vaccines for formerly devastating microbial diseases such as small pox); in broader based education and in far more humane and even-handed social arrangements for populations in general. Figure 4.1 (a) and (b) shows the pattern of income growth per capita across all major regions of the world economy. Figure 4.1 (a) does this using a natural (dollar) scale. Figure 4.1 (b) shows a logarithmic scale in which the size of the gaps between lines can be interpreted as *relative income gaps* as defined earlier. It is clear from the very long-term perspective provided by these diagrams that the patterns of income gain were *always* unevenly shared. Today's inequalities in development are nothing new.

Figure 4.1: Income Levels since 1000 AD





The Rise of Western Europe

Initially, in the first half of the second millennium (1000-1500), Western Europe gained a significant income advantage (absolute and relative) over all other regions. This was due in large part to the commercial successes of international trading nations such as the Holland, Portugal and the Venetian Republic. That advantage was intensified after 1500 with the very rapid increase (by the previous historical standards) of incomes in Britain. Rapid income growth in Britain was evident before the industrial revolution. It became an increasingly important factor after that and especially after 1820 when British commercial power strengthened internationally against the background of relatively little significant military conflict. By 1870 Western Europe was already five times richer than the global figure for average income that had applied to most nations prior to 1500.⁴

The Decline of Asia

We will write much in this book about the great successes of the East Asian economies in the modern era since 1950. Debate about the so called “East-Asian Miracle” represents one of the great watershed moments in the controversy over the effectiveness or otherwise of the Washington Consensus Policies after 1980⁵. Here

⁴ Source: Angus Maddison [2002]

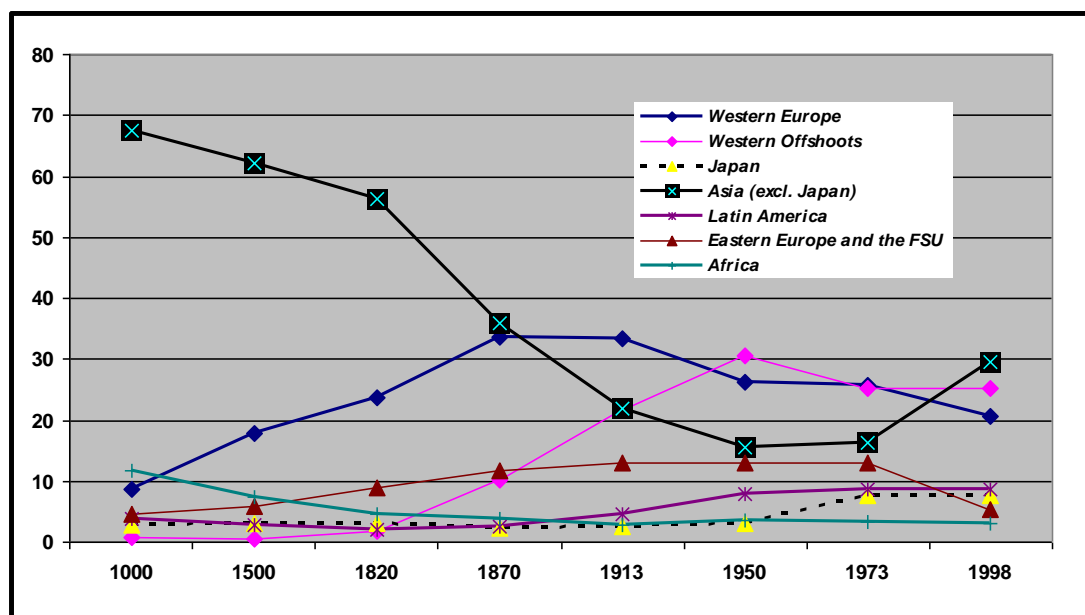
⁵ In brief, a study published by the World Bank in 1993 (World Bank (1993)) was the result of intensive research into the successes of a number of East Asian economies from the 1960s onwards. The study was requested and largely financed by the Japanese shareholding in the Bank and was intended to show how various types of state-involvement in economic policy-not least in Japan itself - had been a critical ingredient of the economic successes. The study did indeed demonstrate that some state involvement had been important but more significantly concluded that this experience could not be generalised across to other still-developing countries. It is claimed that the results somewhat upset the Japanese because the sustained liberal positioning of the Bank at that time continued to run counter to the known historical experience of Japanese post-war developments (See also Robert Wade (1996)

we merely recognise the relative failures of that region in early history. The post-1500 income gains in Western Europe had the effect of rapidly changing the proportions in which total world income was distributed geographically: Asia was a major loser in relative terms. See also Figure 4.2 .

If the *Wall Street Journal* or *The Economist* had existed at that time, the big headline news of the period from 1500 to 1913 would have been about the accelerating economic **decline** in Asia. In that period the clear earlier dominance in this regard of Asia (mainly India and China) with 68% of total world output in AD 1000 and still over 50% by 1820 was rapidly reduced. This relative decline is clearly seen in Figure 4.1 (b) that shows (by reference to the vertical distances between countries) the manner in which Asian growth rates were lagging those of other regions. By 1870, Western Europe and Asia (excl. Japan) accounted for broadly the same shares of total world output – 33% and 36% respectively. *This was in spite of the fact that Asia already had five times as many people as Western Europe.* Today it has nine times as many. In the next forty years before World War I, Europe’s share of total world output stayed broadly constant while that of Asia fell further to only 22 percent.

The relative decline in Asia was associated in that period with the clear failure of its own *income per capita* to grow at anything like the rate of Western Europe or indeed to grow at all in absolute terms. Between 1500 and 1820, Asian per capita growth was either zero or slightly negative. After 1820 that situation was exacerbated because the growth of *total* GDP slowed to almost zero while the growth rate of the Asian population increased at a faster rate than did that in Europe.

Figure 4.2: Shares of GDP 1000-1998



The Emergence of Countries of Newer Settlement

Figures 4.1a and 4.1b together also how rapidly the globalisation of that period (1820-1913) spread the benefits of European technology and income gains to the areas of new settlement in the USA, Canada, Australia and New Zealand. These are

collectively referred to by Angus Maddison (2002) as “Western Offshoots” With initially very small populations, these countries accounted for less than 2 percent of total world output in 1820. But the rapid population gains made possible by large inward migration together with the dynamism of their economic systems rapidly resulted in levels of income per capita that equalled (by about 1830) and then overtook those in Europe (certainly by 1870). The large relative gains and their timing are clear from the logarithmic scale depiction in Figure 4.1 (b)

In terms of *shares* of global output, these countries of newer settlement achieved equality with the formerly dominant Asian countries by 1913 and rapidly grew to be twice the size of the Asian group collectively by 1950, and for the next two decades until the early 1970s. Then the surge of successful growth from a sub-set of fast growing Asian countries including South Korea, Taiwan, Singapore and China) –the subjects of the Bank’s study on the *East Asian Miracle* - more than recovered the lost ground by the end of the 1990s – see Figure 4.1 and 4.2.

Japan – the first Successful Developing Country of the Modern Era

The situation of Japan was rather different. Japan achieved its own significant spurt of growth after around 1870 bolstered by the Meiji Restoration of 1868. With population growth also increased after that date, the growth of total GDP was sufficiently high to more or less retain the Japanese share of total global GDP at around 2.5% (Fig. 3.2). But *absolute* income levels per capita in Japan through 1913 were only 40% of the European averages and only 26% of those in the countries of new settlement such as the USA. That situation changed hugely after World War II when Japan was one of the first beneficiaries of the “Reconstruction “ support offered among others by the new International Bank for Reconstruction and Development (i.e. the World Bank) . Since 1950 Japan has more than doubled its share of global output (to almost 8%) and has achieved a level of GDP per capita in excess of that in Western Europe and second only to that in the Western Offshoots. It provides a clear examples of the presumption that many development economists held in the early post-War years about the probable effectiveness of large international transfers of resources.(see Adelman (2001) as also cited in our Preface.

Japan is an example par excellence of an erstwhile developing country that has achieved a high level of development and GDP per capita in the modern era.

Latin America – New Settlement but less Success!

Latin America had some of the same features of new settlement seen in North America and Oceania. But the dynamism and rapid transfer of new technologies were less pronounced there than in the new America states of Thomas Jefferson and Benjamin Franklin. As a result the Latin countries were demonstrably less successful in terms of generating income gains. One reason for this was arguably the much larger indigenous populations that were treated as under-classes by the Spanish and Portuguese colonisers and so were not given either the access to resources or the education that could have helped raise income levels. A second reason was the far greater extraction of investable resources (e.g. savings being taken back to Spain) than occurred in North America. A third was the retention, at least in some of the Iberian colonies of privileged aristocratic and clerical elites that inhibited both the intellectual freedom and the entrepreneurial instincts of the settlers. We shall see more of this when we consider the organisation of Latin American agriculture in Chapter **XXXX**.

Hence from a similar starting point to the Western offshoots in 1500, Latin American income per capita by 1870 had fallen relatively to only 30% of that achieved in the Western offshoot countries such as the USA. Thereafter and for some 100 years,

Latin American GDP growth compared reasonably well with that of the Western world although growth rates *per capita* were pulled down by still high rates of population growth. The initial successes of the import substitution strategies of the 1960s helped to sustain very rapid growth for a time and also resulted in an increased Latin American share of total world output. That situation was arrested sharply in the 1980s by another so-called “lost decade” – this one following the major debt crisis that began in Mexico in 1982. More of this below.

Eastern Europe and Africa

These may seem like strange bedfellows. However, the two regions of Eastern Europe (including the countries of the Former Soviet Union - FSU) and Africa are the two that have suffered the most significant declines in modern times.

In the case of Africa, this decline merely perpetuates a situation of very long-standing: Africa’s share of total world income at its peak in AD1000 was almost four times the level to which that share had fallen by 1998. In the case of Eastern Europe, the collapse was almost fully concentrated in the 1990s after the break up of the Soviet Empire. It followed an extended period of significant growth and build up of industrial power especially in the decades after 1950 (see Fig. 4.2).

4.4: The Developing Countries after 1950

The analysis and diagrams above vividly define the ebbs and flows of economic fortunes that have characterised much of recorded economic history. History shows how poorer underdeveloped regions have been able to raise incomes radically and in some cases to build global economic power on the back of such development (e.g. the USA from the second part of the C19th, Japan after 1950 and China after 1990). The modern period since 1950 has continued to manifest a similar flux. But it is a more important period for our analysis because it contains most of the specific episodes that have shaped today’s conventional wisdoms about how low-income developing and transition countries can best conduct their policies to achieve more rapid growth. It is also our main laboratory for most of the empirical testing of propositions about development that we see in the literature.

The episodes that have been most critical include:

- The de-colonialisation of most of today’s developing countries beginning with independence in India and Pakistan in 1947 and then in countries such as Ghana from 1958.
- The birth of the modern aid industry including the new multilateral institutions such as the World Bank and the IMF that occurred at about the same time.
- The hike of oil prices by the OPEC cartel in 1973/74 and the role of that price hike in precipitating a major international debt crisis in 1982 that was particularly devastating in Latin American economies. It was also the start of a process that led to far greater liberalism (in trade, pricing, ownership of enterprise) in the conduct of policy in most developing countries through the 1990s.
- The global recession of the early 1980s that saw slow growth and inflation co-existing (“stagflation”) in many major industrial economies for the first time. This greatly raised the profile of inflation and inflation-control as a key issue in these countries but also in “development” policy for many low income countries

- The collapse of the last great international empire – that of the Soviet Union – in 1989 and the havoc this wrought to the economic situations of many of the 28 countries that had previously been a part of that empire.
- The Mexican economic crisis of 1994 – the first significant crisis in a country that had followed the new liberal principles of economic management (the Washington Consensus) advocated forcefully (after 1980) by the powerful International Financial Institutions such as the World Bank.
- The Asian and Russian financial crises of 1997 and 1998 - further serious challenges to the then conventional wisdom about the “right” way to run economic policy in relatively poor countries.
- The successful reforms in China initiated in 1979 and the sustained growth thereafter that has transformed the world’s most populous country into the main economic powerhouse of the C 21st.

The story told below is largely a descriptive one. However, in documenting post-1950 differences in performance between countries, it also tries to anticipate some of the insights that these and other critical episodes of the history can provide. Again we benefit from the painstaking research on longer-term development undertaken by Angus Maddison (2002 and 2003) and his colleagues much of this under the umbrella of the OECD.

The earlier post-colonial years⁶

The major break-out from the static income levels of most of their recorded history (see Figure 4.1) was delayed in most of today’s developing countries until the post-colonial period after about 1950 (or a bit earlier for countries such as India). But after 1950 these countries undoubtedly did enjoy such a spurt. David Morawetz writing on this subject in 1977 noted how rapidly developing countries on the average had grown in the first 25 years of the new post-colonial world. The gains achieved were impressive in general relative to ALL of :

- the extraordinarily sluggish growth they developing countries had achieved in some 5,000 years of history until that date
- the growth rates that had been achieved by industrial countries since the industrial revolution at the end of the 18th Century
- the growth rates that the few informed observers of the time expected of developing countries from the vantage point of pre-1950

⁶ The use of concepts such as the “colonial period” applies mainly to countries in parts of Asia, most of Africa and the Caribbean. Most major Latin American countries emerged from colonial influence much earlier .

Box 4.6: The 1950s as a Watershed for Development Thinking

It is difficult now that we are awash with analytical and popular writing on development topics to imagine a time when this was not the case. However as David Morawetz (1977) reminds us there really was very little work in this area until the 1950s. In the late 1940s the international concerns of politicians and even learned societies such as the American Economic Association, were much more focused on the post-war problems of Germany, Japan and the United Kingdom. Most of the early post-war literature on economic development was focused on southern and eastern Europe – this helps to explain the enormous influence on development economics of the well-known paper by Paul Rosenstein-Rodan in the *Economic Journal* of 1943. This was about Eastern Europe and not about Africa, Asia or Latin America! There were no university courses on economic development as such. W. Arthur Lewis' textbook entitled *The Theory of Economic Growth* and published in 1956 was one of the very few such books then available.

In that first 25 years of “development” - remember that we are still using income as our metric – the GDP of developing countries as a group grew at 3.4% per annum which was far higher than the industrial countries growth in the post-industrial revolution period (estimated by Simon Kuznets as being about 2 percent per annum). That period also set a pattern that continues until the present. Specifically, some 18 countries with combined populations of almost 1.2 billion grew at rates as high as 4.2% and so roughly tripled the real incomes of their people in the 25 years documented by Morawetz. At the same time several countries of South Asia (including India) and most of Africa achieved growth rates of less than 2 percent per annum and so added only a few dollars to their extremely low starting levels of income per capita. The far more complete data sets since compiled by Angus Maddison and drawing on the ICP project of Heston and Summers (1984) make it possible to revisit these important contrast and also see them in the longer term context through the end of the millennium.

The record from 1950 to 2000

The period since 1975 has seen **five** particularly significant developments that have either re-enforced or changed the broad trends in growth noted by Morawetz.:

- China – the world's most populous country with 1.4 billion people - has confirmed its ability to sustain exceptionally high growth rates under a mixed economic system. Its rigid and repressive communist political system has increasingly found ways to co-exist with liberal economic systems and large levels of foreign investment in many provinces of the country
- East Asian countries more generally have continued to show huge economic dynamism – the financial crises of the late 1990s have merely slowed the momentum
- Latin America has suffered a chronic loss of growth momentum as a result of various financial crises beginning with the major debt crisis of the early 1980s and sustained with the Mexican, Argentinean, Brazilian, Venezuelan and other crises of the past decade.

- The 25 European Transition economies that were either republics of the Former Soviet Union (FSU) or Central European Economies (Poland, Hungary etc.) under the ambit of the USSR in the Council for Mutual Economic Assistance (or COMECON), have sustained large declines in income since 1989. In many cases, recovery from GDP losses of 50% or more has been slow. Hence many of these countries especially in the Caucasus and Central Asia are now bracketed in poverty terms with the poorest countries in Africa and Asia.
- African countries in general have failed to break out of the patterns of slow growth and declining importance as world trading nations that were already well established prior to 1950.

More generally the 1980s and 1990s were much less good for growth than the earlier post-war years albeit with great variations in outcomes from region to region.

In the next few paragraphs, the 50 year growth record of these and other major groups of developing countries are reviewed. The purpose is to pinpoint where development progress has been occurring over this long time frame and where it has lagged. Perspective is achieved by comparing each developing country group (using the groupings proposed by Maddison) with relevant benchmarks.

A Digression on Method – A different Pedagogy

A preferred method for academic economists studying the performance of economies over time has been the analysis of *convergence* tendencies or the lack of them. This method compares the data of (i) the initial income levels of each country in some base year such as 1950 with (ii) the average growth rate of, for example, per capita income achieved from 1950 to a final year such as 1998. Formally in the relationship shown in Equation 4.1, we would need the coefficient “ β ” to be negative to show convergence.

$$Y_g = \alpha + \beta Y_b \dots\dots [4.1]$$

where Y_g is the growth rate of income per capita from, say, 1950 to 1998 and Y_b = the per capita income in the base year of 1950. We will look briefly at some results from this methodology at the end of this chapter and in more depth in Part II. But here we note that the method in effect compares all countries in a sample. The test of “good” performance is that the poorer countries of the base year should exceed the growth rates of richer countries in the next intervening “n” years (e.g. the 48 years though 1998). There is no **absolute** standard of good growth performance against which to judge individual countries or groups of countries.

In this present Chapter we use a different approach that enables us to put all major groups of developing economies under the microscope by comparing their 50-year growth record with a *common absolute standard of performance* in terms of economic growth. This is an alternative to the more familiar convergence approach but one that enables us to see more clearly the evolving nature of the development problem in each major grouping of countries over the 50-year time period.

The comparisons are illuminated by using two main sets of benchmarks for each group of countries that we analyse. Specifically the questions asked are:

- How did the growth record of each region compare with that of the two main rich regions of the world economy, namely the USA and Western Europe?
- How did that same growth record compare with a hypothetical growth rate of per capita GDP of 1.12 % per annum? This is the growth rate achieved by the Western European economies during their own golden age of growth in the 93 years from 1820 to 1913 and the outbreak of World War I. This comparison is included to represent some sort of upper limit on the *expectations* for developing country growth that was held at the beginning of the post-colonial period around 1950 (see Morawetz (1977) and Colin Clark (1984). So the second question can be re-phrased as – did the region exceed the growth rate limit expected of it *ex ante*?

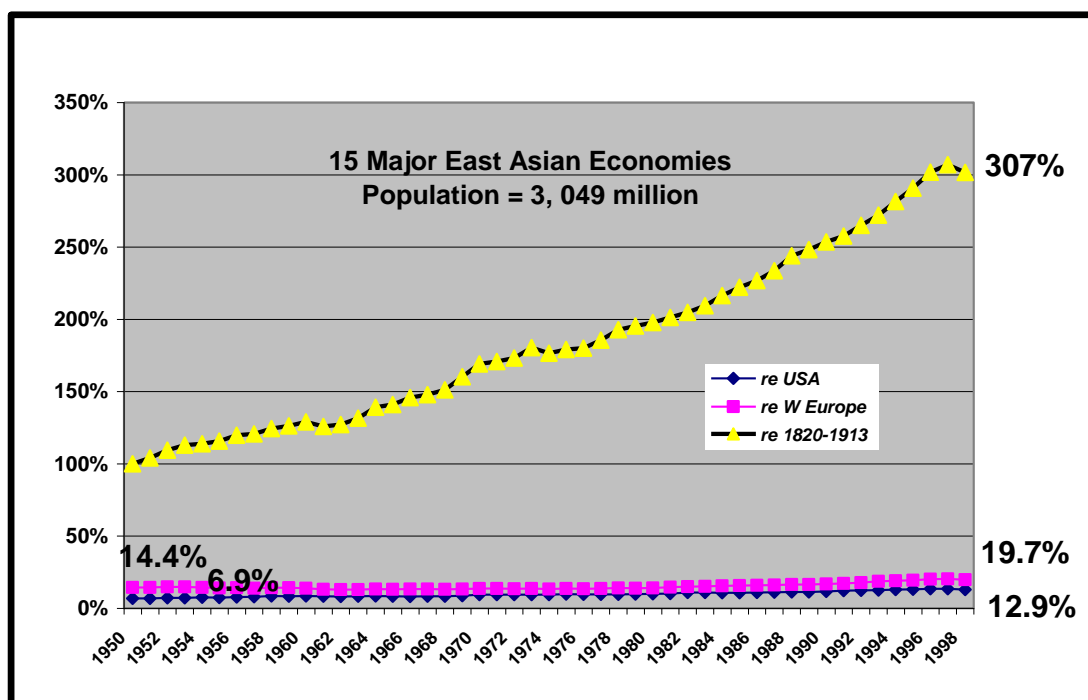
4.4.1: The Major Asian Economies

This is a logical place to start since the countries in this group include the world's two most populous countries namely India and China and so a substantial majority of the world's poorest people. The 15 countries together account for XXXX percent of all the world's very poorest people.⁷ Figure 3.3 shows the impressive gains in income levels per capita that they have achieved over the fifty years of modern economic development. The 15 countries as a whole have sustained high growth rates of income per capita. This gives them today an average income that is no less than THREE times higher than that which would have been achieved by merely replicating the growth rates of Western Europe as achieved in the period of that region's growth spurt from 1820 to 1913. This is shown as the top (yellow) line plot in Figure 4.3. The two lower line plots show the evolving GDP per capita position of the Asian economies vis a vis the USA and the average of the Western European countries respectively. Furthermore this hugely impressive average gain applies to a total population of over 3 billion – half of the population of the world as a whole and more than XXX percent of the population of the world's low and middle-income countries as documented in Chapter 3.

The East Asian successes of this period have provoked some of the most interesting and important debates in all of development economics. Many of the countries including Japan, Malaysia and South Korea espoused *some* of the key features of the liberalising agenda that became the global conventional wisdom from 1980 onwards (the so-called "Washington Consensus"). But these countries also made intensive use of a wide variety of state interventions (e.g. credit subsidies to particular industries and to exports) to help direct particular aspects of their development in ways consistent with the early theorising from the period of "high development economics" to use Krugman's phrase. It was the balance between the liberal and the state intervention aspects that was the central theme of the heated debates about the so-called *East Asian Miracle* of the mid-1990s (see World Bank (1993) and Wade (1996). Aspects of this debate are presented in Chapters XXX and XXX

⁷ In addition to China and India, the 15 include Indonesia, Philippines, South Korea, Thailand, Taiwan, Bangladesh, Burma, Hong Kong, Nepal, Malaysia, Pakistan, Singapore and Sri Lanka

Figure 4.3: Asian Growth: 50 Years of Rapid Progress



However, this has not turned most of these countries into rich economies. The lower part of Figure 3 shows that taken together the 15 major countries of Asia have narrowed their *relative* income gaps with both of the two rich country comparators. The income level in the Asian 15 as a group is now 12.9% of the US level as compared to less than 7 percent in 1950. It is now 19.7% of the W. European level as compared to 14.4% back in 1950. These gains are also impressive. However, the gaps are still large and translate without doubt into unacceptably poor economic and social conditions for millions of people.

Equally the device of examining averages across the 15 countries hides the significant inequalities in performance as between the 15. So whereas the average resident of Singapore has enjoyed a per capita income gain of over 9,000 percent since 1950 (nearly a 10 fold gain), the average person in Bangladesh, Burma, Nepal and Pakistan have enjoyed gains of only 55%, 165%, 92%, and 203 % respectively. Of particular interest given their huge populations are the outcomes for China and India. China has achieved an impressive 640% per capita income gain over the 50 years. India meanwhile from a somewhat higher starting point has achieved gains of less than half this. Hence China has fully closed the initial 1950 income gap with India (their 1950 incomes were \$439 and \$619 respectively in 1990 prices) and has established a substantial gap in its own favour (\$1,441 in 1990 prices). For the moment we merely note this substantial difference – attempts to offer explanations must largely await Parts 2 and 3 of the book. Box 4.6 provides a few of the key ingredients of those explanations.

Lessons

The obvious lesson from the 15 large Asian economies that together account for half of total world population is that rapid economic growth – at rates way beyond anything thought possible from the vantage point of 1950 – have been achieved in the modern era. *So obviously these large gains are possible* and they offer a salutary

message to those who take a pessimistic view of such matters. The successes have moved hundreds of millions of people in this region out of extreme poverty during the past fifty years (China for example has seen its poverty head count fall to 17% of the population (around 240 million persons – World Bank (2001)) from a level well over 50% back in the 1950s and India has seen a decline of some 5 percentage points in the poverty ratio in the past decade).

More difficult to resolve is the question of what this record tell us about the policies and methods that have been critical in achieving these successes. None of the more successful countries with the possible exception of Hong Kong have adopted particularly liberal approaches to policy. Most have engaged the state actively in the development process and most informed commentators argue that this has been a crucial element of the successes. The World Bank in its 1993 review agreed with that proposition but qualified it with two subsidiary propositions. The first was that the state interventions in the East Asian economies had largely been “market-conforming” In other words the interventions had relied to a high degree on the guidance that the market would have offered had it been working reliably Second, the Bank study noted that the disciplines and quality of public administration found in East Asia would not easily be replicated elsewhere. Hence there was no presumption that what had worked well in Asia could be exported to other developing country contexts. For example export subsidies were offered only for limited periods of time and were then withdrawn from industries that failed to export. Other regions of the world that have used identical policies have not had the discipline to withdraw the state supports when they appeared to be failing. (World Bank (1993) and also Fine (2006)).

What is also clear about the Asian experiences is that the most dramatic successes have been achieved by countries that have engaged effectively with the global system of trade and finance (see the Box 4.7 below on China and India). But the contrasts *within* this Asian group reveals that success is by no means guaranteed. The differences in both macroeconomic and structural policies as well as administrative procedures and degrees of administrative efficiency also play an important part in explaining the differential rates of success. Importantly, some of the most successful economies have retained elements of centralised control of economic activity although this is dissipating in most cases and not least today in China.

Box 4.7: Comparing China and India 1980-2001

	1982-1986		1987-1991		1992-1996		1997-2001	
	China	India	China	India	China	India	China	India
Growth of Income per capita	9.8	2.8	6.2	3.3	10.9	4.7	6.8	3.3
Industrial Value-Added (% of GDP)	44.0	26.1	43.0	26.9	47.5	27.0	50.3	26.7
Agricultural Employment (% of GDP)	62.5	na	55.3	68.7	50.0	66.8	46.6	na
Exports (% of GDP)	9.7	6.0	15.3	7.1	21.4	10.3	23.7	12.4
Foreign Direct Investment (% of GDP)	0.4	0.0	1.0	0.1	5.1	0.4	4.3	0.6
Domestic Savings (% of GDP)	34.4	19.6	36.6	21.4	41.5	21.0	41.1	20.7
Fixed Investment (% of GDP)	29.3	20.0	28.2	22.0	34.8	22.7	35.6	22.0

These data show that China's much higher growth of income per capita relative to India has been associated with:

- A far more rapid transformation of China's production towards industrial products and a rapid decline in those dependent on agricultural employment (remember Colin Clark's proposition as explained in Ch.1)
- A very rapid growth of Chinese exports so that relative to GDP these are no twice the level of those in India
- A rising Chinese savings rate from a level already much higher than India's in 1982
- The successful attraction by China of much larger and expanding volumes of FDI
- Rising investment levels in China relative to GDP and relative to those achieved by India

Dr Jayanta Roy a leading Indian trade economist recently gave a personal view of India's present situation . In trying to explain India's poor trade performance, he wrote in India's *Financial Express* in December 2003 as follows:

"We still have poor infrastructure, cumbersome administrative procedures and below- average logistics. The latter problems explain our dismal rank of 83rd out of 133 countries in the Corruption Perception Index of Transparency International. The administrative procedures associated with trade are probably the most primitive in the world. Even to just export, we require 257 signatures, 118 copies of the same document taking 22 hours to key-punch. This involves dealing with a multitude of GOI agencies separately! This evokes hardly a protest from established exporters who have mastered the knack of going around the system and having prompt clearance by paying bribes. But for new global players this is posing a major irritant. Clearance of shipments takes days in India as against hours in successful exporting countries.

What has been our performance in relative terms? I am afraid, there is nothing to be excited about. Our annual export today is about \$44 billion of goods as against \$88 bn by Malaysia, \$65 bn by Thailand, \$160 bn by Mexico, \$40 bn by Poland and \$458 bn by China including Hong Kong. Our share in world exports is a dismal 0.7% as against 7.4% of China. Excluding Hong Kong, China's share is till over 5%.

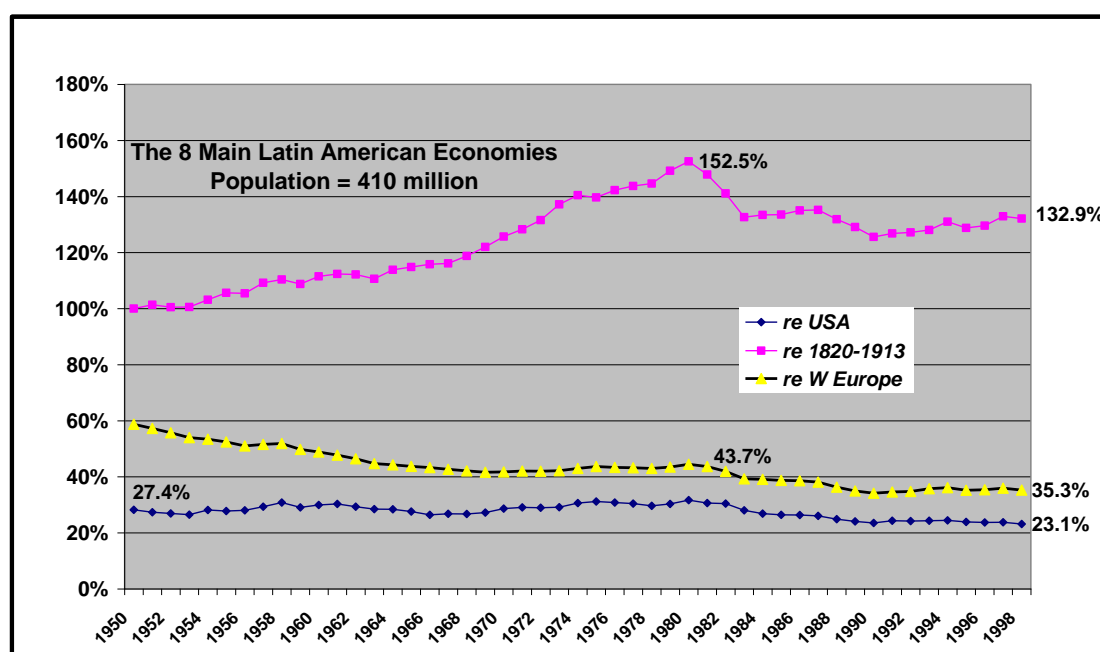
The story is as dismal when we consider FDI. In terms of total FDI flows during 1997-2002, India attracted a mere \$11 bn as against \$165 bn by China, \$115 bn by Brazil, \$63 bn by Mexico, \$20 bn by Thailand and \$12 bn by Russia. Also, we still have the highest tariff wall with average tariff level of 30%, one of the highest in the world."

Clearly this is only on a part of the explanation of India's poor performance relative to China in the past fifty years. But note how countries much smaller than India (as well as China) have managed to achieve far greater export success in the difficult globalised world of today.

4.4.2: The Main Latin American Economies

This group of 8 countries that includes Argentina, Brazil, Chile and Mexico⁸ also accounts for a large proportion of world population (some 400 million in total). For some 30 years after 1950 this group of countries also achieved impressive growth (Figure 4.4 above). By 1983 they were enjoying incomes that were 50 percent higher than those that would have been attained merely by replicating the Western European growth rates of the period 1820-1913 (see the top line plot in the Figure). But this relatively strong performance was seriously interrupted by the events following the first post-war debt crisis beginning in 1982. Hence from 1983 to the present this group of countries as a whole have lost ground relative to the hypothetical growth rate needed to match Western Europe's historical performance. Today, they are only at a level some 32 percent higher than this target.

Figure 4.4: Latin America: Impressive Post-War Surge but Not Sustained



Lessons

What emerges as a major issue for consideration in Parts II and III of the book is the importance of successful macroeconomic management including the management of inflation and debt levels. The severe interruption to living standards encountered by the Latin American economies after 1982 (but not the majority of the successful East Asian economies) is explained in large part in terms of failures in terms of their macroeconomic management. Before that these countries taken together were easily exceeding (by more than 50%) the benchmark growth rates set in the golden age of growth in Western Europe. They seemed to be successfully riding the wave of growth engineered in large measure by the interventionist import-substitution policies that most of them had adopted in the 1960s or before. But the peak of that achievement was seen in 1983 which was also the eve of the lost decade precipitated by the first major post-war debt crisis. The Latin American economies suffered particularly

⁸ the other countries are Colombia, Peru, Uruguay and Venezuela

seriously from this. These problems were still playing havoc with living standards in some countries such as Argentina through the turn of the new millennium.

So there is a strong hypothesis that the particular import-substituting policies used to promote faster growth after 1950 also helped to build up macroeconomic stresses (including unaffordable fiscal deficits and unrealistic exchange rates given the inflationary pressures that were also built up) that ultimately showed up in the debt crises that most of these countries sustained in the 1980s. The Asian economies by contrast largely avoided such difficulties at least until 1997. This was in spite of the fact that some of them such as South Korea were extremely large international borrowers in absolute dollar terms.

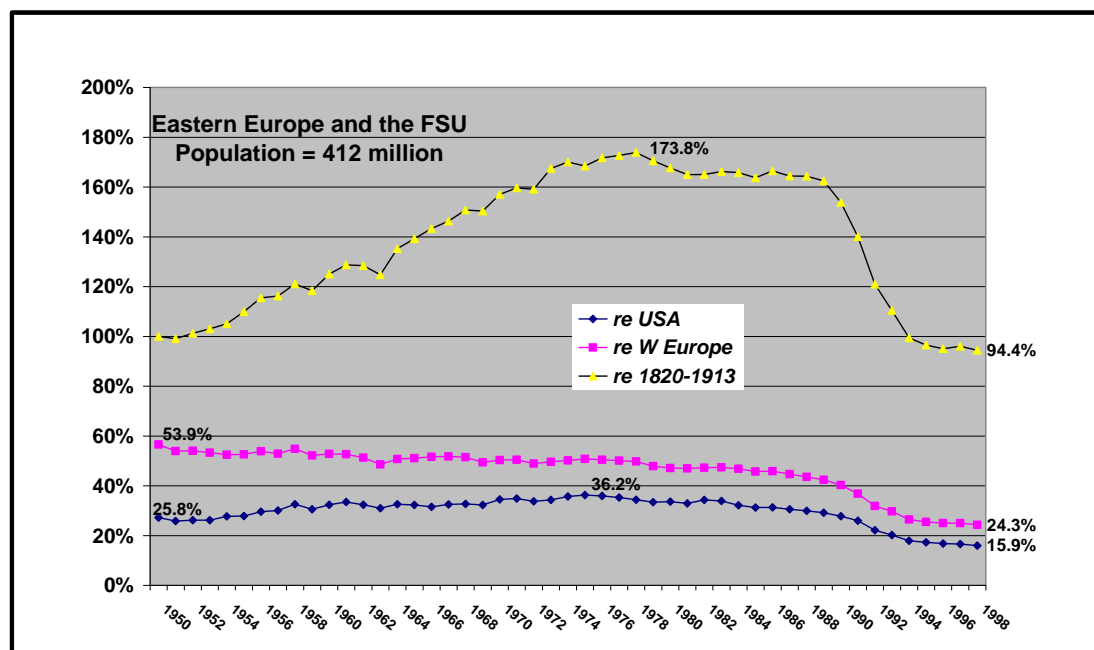
These difficulties in the latter part of the period since 1950 largely removed any hope of the Latin American countries closing the income gaps with the USA and Western Europe. They started out in 1950 much richer than the Asian economies and so with smaller gaps to fill. But those gaps have widened in the subsequent fifty years so that today, on average, they stand at 23% and 35% of the US and W. European income levels respectively. Note that the typical Latin American is much better off today in terms of income than was the case in 1950. But both relative as well as absolute income gaps with the richer countries have widened.

The major inequalities of performance within the group of countries are rather less marked than is the case in Asia. So for example, the overall income gains since 1950 have averaged 85 % for Argentina and 126%, 155%, 146%, and 181% for Brazil, Chile, Colombia and Mexico respectively. This similarity of outcomes over an extended period suggests some particular “Latin American factors” that may be involved in explanations of growth. It also indicates that the Latin group lacks a spectacular success story at the level of, say, Singapore.

4.4.3 Eastern Europe and the FSU

This group of countries in which Russia and Ukraine are the most highly populated (200 million together) account for a further 400 million people overall. In 1950, the average level of their incomes was broadly comparable with those in Latin America. Thereafter a further 30 years of moderately good economic performance delivered major income gains relative to the hypothetical growth rates based on Western Europe’s historical performance (Figure 4.5). In fact in this regard, they were only marginally behind the performance of the main Asian economies. In this case, the fully central planned economic system controlled centrally from Moscow has to take the credit for the extremely strong performance relative to the Western European countries that these countries achieved by the early 1980 (they were more than 70% ahead of the benchmark at that stage).

Figure 4.5: The FSU: The New Economic Powerhouse of the C20th but Collapse after 1990



However, as Figure 4.5 clearly indicates, the train began to slide off the rails in the mid 1980s and it then crashed dramatically from 1988 when the Soviet Empire started to collapse. The income losses in some major countries including Russia and Ukraine since then have been significantly larger than in the economic collapse seen in the USA in the Great Depression of the 1930s. They have resulted in income levels by the turn of the new Century finishing below those associated with the hypothetical historical growth rates of W. Europe.

Lessons

The message that this very uneven growth record conveys is easily summarised. As in the case of Latin America, it indicates that an economic system that was able to achieve great success for many years was eventually undone by some inherent stresses that that system contained within it. In the case of Latin America, the lesson learned was about the need to manage better the macroeconomic policies of a mixed market economy. In the case of Eastern Europe and the FSU the lesson was more fundamental – the whole political system, including the institutions, on which economic performance had been based prior to 1989 needed to be re-designed. Very sluggish growth was the general experience while this was going on.

In this case we are on safer ground in identifying the features of the old system that failed the economy from the 1980s onwards. That system was great at producing growth while the planners ruled but hopeless at sustaining growth and living standards once the planning system fell apart. The story of the industrialisation of Siberia provides a (large) microcosm to illustrate the more generic problems of the failures of a fully planned system. Box 4.8 quotes directly from a recent article in *The Moscow Times* by Clifford Gaddy and Fiona Hill.

Box 4.8: Failed Industrialisation in Siberia 1970 - 2000

In the 1970s, the intensive exploitation of energy reserves and some of the largest construction projects in Russian history made Siberia the motor for Soviet growth. These included the construction of the world's biggest aluminum plant, a massive dam on the Yenisei River, the completion of the Baikal-Amur rail line, and gigantic power plants.

Western analysts were astounded by the magnitude of projects, the scale of investment in Siberia, and the rapid rate of growth. But neither the scale of projects nor the size of Soviet GDP meant that the allocation of resources involved was determined by market rules. Siberia's growth was entirely driven by communist planners bent on creating an industrial utopia in this vast region.

Most of the Siberian endeavors would never have been undertaken under market conditions. Some of the largest construction projects were located in the harshest climatic zones of the so-called Russian North, where the costs of construction were extremely high. By the late 1980s, Siberian projects offered an extremely low return on their massive investment. Gorbachev's economic advisers backtracked from commitments to huge construction ventures, criticizing giant outlays and postponing many projects indefinitely.

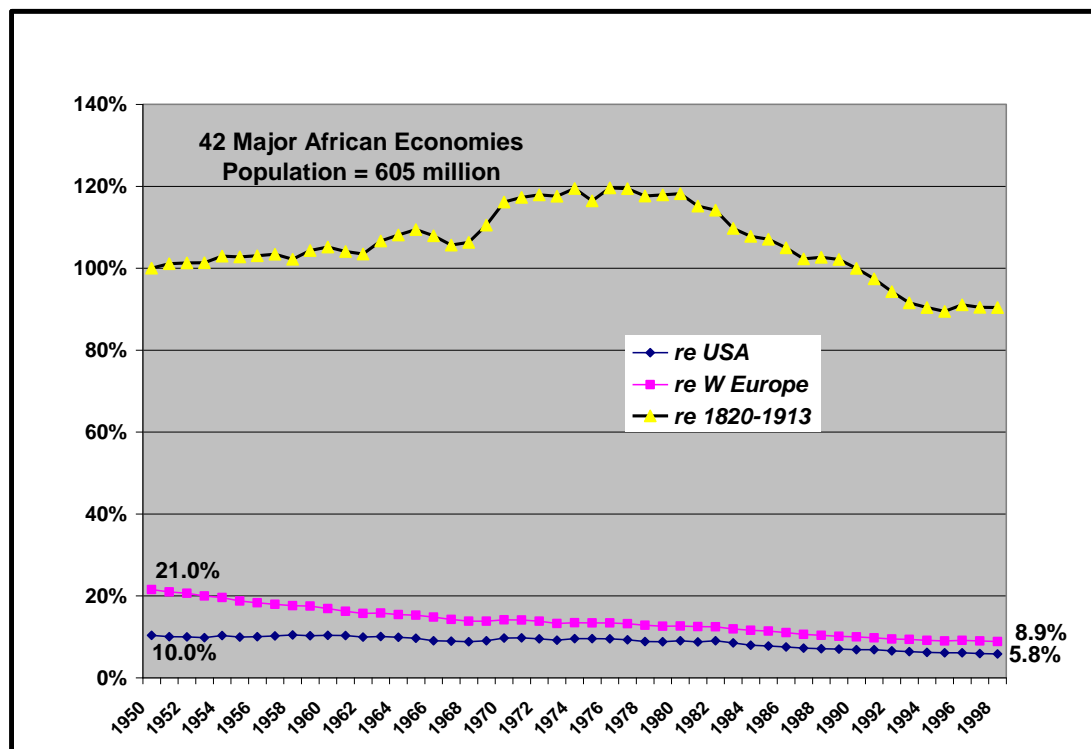
The Siberian industrial enterprise was brought to a screeching halt by the collapse of the Soviet Union. Today's Russia has inherited the burdens of maintaining all the huge enterprises communist planners left for it in distant places. And millions of Russian citizens find themselves stuck in Siberian cities with bankrupt industries and dismal living conditions. Those who would like to move are prevented from doing so by persistent institutional barriers to mobility and insufficient jobs and housing in other parts of the country.

The Moscow Times, November 12th 2003.

4.4.4: The Major African Economies

The 42 major African economies represented in Figure 4.6 enjoyed a modest spurt of growth in the early years after many of them gained their independence from former colonial powers such as Britain, France and Portugal: beginning with Ghana in 1958. By the early 1980s they were 20% ahead of the benchmark of growth based on the earlier achievements in Western Europe. They got there, for the most part by using a variety of interventionist policy approaches along similar lines to those employed in Asia and Latin America. However, this growth was almost everywhere extremely feeble relative to the record achieved in the 1950 -1975 period in almost all other regions and groups of countries.

Figure 4.6: A Brief Surge after Independence but Sluggish Growth since the mid-1970s



The positive gains in per capita income that were achieved were welcome. However, since these countries started out in 1950 at such a low base level - only 10 percent of the US income level even in PPP terms – the growth that was achieved still left most of the Continent’s people in severe poverty. Beginning in the mid-1970s with the first large hike in OPEC oil prices, growth rates generally slowed and, for most countries, the benefits of even the early gains through 1975 were reversed. By the end of the century Africa’s income per capita had failed to keep track with the 1.12 percent per annum growth that we have used as one of the benchmarks for assessing progress. Indeed it had fallen some 10 percentage points short of the benchmark that we have used in this section: the only region other than the FSU to experience such a failure *This is in very sharp contrast to what happened in large parts of Asia and Latin America.*

In spite of this poor overall record, per capita incomes were higher for most African countries at the end of the period than they had been in 1950. A small country namely Botswana led the way with a gain over the fifty years of more than 1,000 percent – higher even than Singapore. The Continent’s largest countries in terms of population enjoyed a very uneven record. Nigeria (population 127 million - about one fifth of the continent’s total and also a country that has benefited from recent debt relief – but not HIPC) achieved a cumulative gain of only 64% in spite of having massive earnings from oil exploitation. South Africa (population 43 million) achieved a 53% cumulative gain; Egypt (64 million people) gained 196% cumulatively; and the Democratic Republic of Congo gained 133 percent by 1984 only to see these gains decline back to a cumulative income gain of only 74% by 1998 as the mismanagement of the Mobutu regime gradually wreaked its damage.

10 of the 42 African countries are identified by the Maddison data as having *lower absolute* levels of per capita income in 1998 than in 1950. These are Angola, Central

African Republic, Chad, Comoros, Djibouti, Liberia, Madagascar, Niger, Sierre Leone and Sierre Leone. Even some extremely demoralised economies such as that of Sudan show some overall income gains albeit painfully small over the 50 year time span. *So even on the continent of Africa – widely characterised as a development failure - more than 75% of all countries saw some small gains in real per capita incomes*

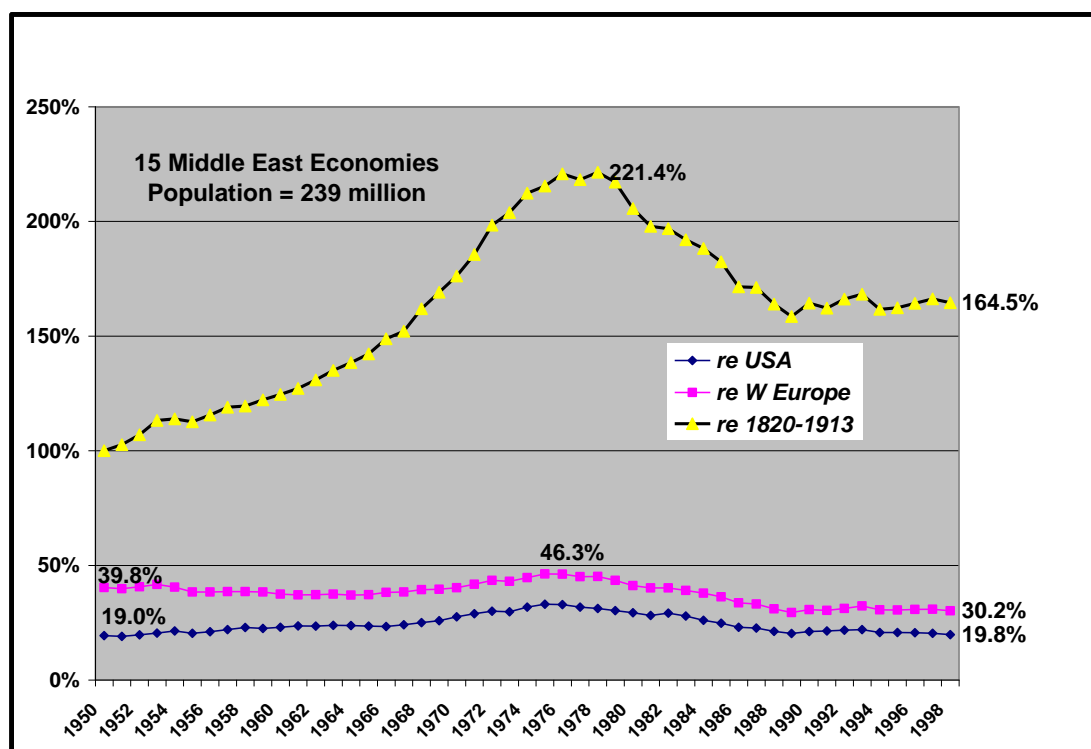
Lessons

The puzzle of Africa's persistent economic failure is another highly documented part of the modern development economics literature. Most explanations now combine many of the failures of policy (including macroeconomic policy) as seen also in the Latin American countries with serious critiques of the governance and government arrangements in many African countries.

4.4.5: The Middle-East

The Middle East region now contains some of the richest countries in the world in terms of incomes per capita. It is the prime example in the post-war years of how major shifts in commodity prices – in this case oil and gas – can help to raise the performance of a set of economies. Many of the middle-eastern economies with small populations and significant natural resources were already at middle-income levels even at the start of the 1950s. But both their absolute and their relative position in the world income scale improved markedly especially in the 1970s and early 1980s as the impact of the large hikes in OPEC oil prices took effect. Specifically by the early 1980s they were already more than 120% ahead of the benchmark growth rate based on the performance of Western Europe during its golden age. At that stage they were performing even better in terms of incomes than the group of 15 large Asian economies analysed earlier. But neither the buoyancy of the oil price and nor the buoyancy of income growth could be sustained at that level. So by contrast with the Asian region that continued to outperform the historical benchmark very considerable, the Middle-East oil producers saw growth rates taper off from the mid-1980s. This still left the region as a whole as a better performer than most other developing country regions. But it was not sufficient to sustain the narrowing of incomes gaps with either Western Europe or the USA that had been seen quite dramatically through 1980.

Figure: 4.7: Rapid Growth Buoyed by High Oil and Gas Prices for a Time



4.5 How Does all this affect People ?

All the discussion of this Chapter to date has been focused in the GDP measure of development. It is now time to link this to some broader measures of development and examine how growth, or the lack of it, has impacted on the quality of life of people in the poorer countries. We do this first in this section by a brief overview of the quality of life changes that have characterised the past 50-100 years. Then in the next section we introduce a convenient set of tools to conduct any more detailed assessment of such changes. The tools in question are the measurable indicators used to assess progress towards the attainment of the so-called Millennium Development Goals (MDGs).

Huge gains in world per capita income since the early 1800s (more than 800 percent overall and accelerating in the past 50 years) have been the vehicle that has brought similar huge changes in the quality of life of large numbers of people on the planet. However, once we relate these undoubted economic gains to social outcomes we quickly see examples of how the large social improvements that greater economic prosperity has made possible co-exist with numerous examples of huge residual failures. Pessimists can easily find evidence that the social progress “cup is half empty”. Optimists can find equally plausible evidence that “the cup is half full”. The serious student of the subject should look at both types of evidence and reach his or her own conclusions. The paragraphs below offer some selective examples of this paradox of huge social success juxtaposed on some depressing cases of residual failure.

4.5.1: Example 1 - Life Expectancy

Successes

The most pivotal of mankind's social improvements has been in relation to life expectancy. For many centuries life expectancy even in today's rich *developed* economies was less than 40 years – it rose rapidly and consistently after the 1800s to reach today's level of around 75-78 (USA and UK). Today in rich countries we worry mainly that some small decline in these high figures seems likely because of life-style changes associated with greatly increased prosperity including the increased obesity especially among younger persons.

China – the world's most populous country - has gone from the depressingly low figure of only 24 years in the 1920s to a life expectancy at birth of 70 today. India – the second most populous - has gone from 25 in the early 20th Century to 63 today. The average female life expectancies in low and middle-income developing countries by 1997 were 64 and 72 years respectively. The male figures were a bit lower at 62 and 66 respectively but still remarkably high by the historical standards of the pre-War years.

Most developing countries – including many of the less successful performers – have seen significant gains in life expectancy in the past 100 years: 85% of the world's inhabitants can expect to live for at least 60 years which is more than twice the expected life span of one hundred years ago.⁹

A central cause of this great success has been an overwhelming reduction in infant mortality. The overall improvements in life expectancy that we see today are attributable to the fact that so many fewer people die early. Lomborg [2001] cites child mortality rates of 1 in 3 in the rural China of the 1920s and 2 in 5 child deaths in Chile in that same era. Overall, in 1950 almost one in every fifth child died before the age of five. Today that overall figure is less than one in sixteen.

Failures

It is the inequality of performance across countries that stand out as the indicator of failure and not the average. Major improvements in life expectancy and infant mortality have occurred over most of the developing world – this general record of success makes the failures of those countries that have missed out even more unacceptable!

World Bank data for 2002 show that 29 countries in the world still have life expectancy below 50 years. All but one of these countries are in Africa – the one non-African country is Afghanistan where life expectancy before the 2002 war was 46 years. Sierra Leone, Malawi, Zambia and Botswana all have average life expectancy lower than 40 years. They have since been joined in that doubtful honour by Zimbabwe where deaths from malnutrition have risen so fast in the wake of the country's economic decline that even the coffin production industry is in crisis and the theft of coffins is reported to be commonplace¹⁰.

These poor figures for Africa are symptomatic of that continent's generally weak economic performance: significant social improvement is very difficult to achieve in

⁹ Lomborg [2002] pg 53

¹⁰ BBC radio news, November 9th 2003

countries where economic performance remains so persistently poor! HIV-AIDS has undoubtedly made a bad situation even worse with life expectancy since 1990 giving up some of the gains achieved in the years before that. Already life expectancy has fallen back from, for example, 58 years in Cote d'Ivoire to 47; from 64 years to 57 in South Africa and from 64 years to a remarkably low figure of only 42 in Zimbabwe (Mead and Over (1966) – update). The average loss of life expectancy (comparing the AIDS situation with the pre-AIDS situation is put at about 10 years with a rise to 17 being a possibility¹¹. But even this horror does not eliminate the broad gains in life expectancy for most of the world's poor countries since the 1950s.

4.5.2: Example 2 - Education

Successes

Longer life expectancy for a large majority of the world's population was described above as *the pivotal* benefit of the economic growth of the past century because it conditions so many other aspects of human existence. Not surprisingly a longer life expectancy adds greater spice and purpose to the lives we are individually granted. It makes it more worthwhile to invest time in education to benefit from higher future incomes, to do more training in existing jobs, and to generally make preparations for a longer period in the labour force. Theodore Schultz, one of the pioneers on research into the incentives that drive development has shown how longer and healthier lives leads clearly to gains in labour productivity in countries such as India.¹²

Box 4.7: Measuring the Quantity and Quality of Education

Education levels in common with other Social Indicators can be measured in various ways. The analysis of performance of an education system will take some account of *inputs* into education, the *efficiency* with which the inputs are used and the *educational outcomes* that result.

Input Measures. The most widely used input variable relates to expenditures. Other widely used measures are the number of *trained* teachers relative to all teachers (typically in primary schools); and the pupil: teacher ratio(s). The amount of public expenditure per student provides a good indication of the commitment of a government to the education of its children. The expenditure in question will normally include scholarships, vouchers as well as direct public spending on schools. Data for some countries will also include private school fees etc. The expenditure measure is flawed to the extent that education services are inefficiently delivered resulting in higher than necessary outlays for any given outcome.

Efficiency Indicators. These measures mainly describe the progress of particular cohorts through the school system. Examples are the share of the entry cohort

¹¹ See for example, Kofi Annan, Concise Report of the Secretary-General on World Population Monitoring, 2000: Population, Gender and Development, Commission on Population and Development, 33rd session, E/CN.9/2000/3. www.hndp.org/popin/unpopcom, cited in Bjorn Lomborg [2001]

¹² Ram and Scultz [1979]).

reaching grade 5 and the primary school completion rate. A more general indicator is the average numbers of years of schooling.

Outcome Indicators: These measures try to say something about what the educational system is delivering for its clients. The most general measure is the *adult literacy rate* defined as the proportion of the over-15 population who can understand, read, and write a short statement about their everyday lives. A second important indicator is the *expected numbers of years of schooling* – the average number of years of school and university education expected of a typical child entering the system. More specialised outcome indicators will measure things such as the mathematical competence of the population or its average IQ level. In general the more specialised the measure the more difficult it is to find regular and consistent international comparisons.

Sources: The prime source of much of the data collection effort behind these various measures is UNESCO, Institute for Statistics.

Evidence that more and better education has been the natural accompaniment to higher incomes and longer life spans is readily available for both rich and poor countries. The most general indicator is *literacy rates*. At the beginning of the 20th Century adult literacy rates in developing countries were only a bit better than 20% and significantly less than 20% for women. By the year 2001, the rates had risen to 83% and 70% for males and females respectively in lower and middle-income developing countries as a whole.¹³ Even in down-trodden Sub-Saharan Africa the overall literacy rate was up to 67% (males 70% and females 64%).

In rich Western and Eastern countries, the average years of schooling (see Box 4.7) are now typically around 15 -17 depending on country. This is an increase of 3-4 years over the levels seen in 1960. In developing countries the average number of years of schooling has gone from levels typically less than 5 years in 1960 to more than 10 -12 years in many countries today. But a few countries still have numbers below 5 years.

Failures

The great gains in educational opportunities around the developing world have not however brought the children of those countries into anything like parity with their counterparts in rich countries. The improvements in the poorer countries have mostly been seen at primary levels with corresponding gains at secondary level being far more patchy (see also the Figures of country-by-country performance shown in Chapter 5). The negative results include very high rates of adult illiteracy in poorer countries with an estimated 1 billion persons being functionally illiterate in the world as a whole.

4.5.3: Example 3: Health and the Incidence of Major Illness

Successes

HIV/AIDs is today's big headline issue as regards health in the developing countries and rightly so. But the attention devoted to this tragic condition also needs to be seen in the context of the impressive long run gains in health outcomes in most low-income as well as in richer countries. The huge improvements in life expectancy and

¹³ World Bank, World Development Indicators, 2003.

the overwhelming reduction in child mortality rates discussed above could not have been achieved without people generally becoming much healthier.

Greatly improved material standards of living for most people in the past century or more have provided the wherewithal in terms of improved nutrition, better clothing, better housing that have supported the general gains in health. But the improved personal and public hygiene that has become a feature of all modern economies – greater awareness of the cause of bacterial infections, improved food preparation, better sewerage arrangements, more rapid quarantining of infectious outbreaks etc – have all contributed further to these gains. A third and decisive factor has been the substantial (but not yet complete) victory that modern medical science has achieved over infectious diseases – such as pneumonia and tuberculosis as well as cholera, typhoid, syphilis and meningococcal infections. Lomborg citing other authorities¹⁴ shows that the rate of fatal infection for the main killer diseases declined from 800 per 100,000 persons in 1900 to around 50 by 1980. Since 1980, a slight rise in pneumonia infections (mainly affecting the older groups in aging populations) along with the rise of HIV/AIDs has pushed the numbers back up slightly but the incidence remains today at less than one eighth the level seen in 1900¹⁵.

Failures

Against this background of greatly improving health status in both rich and poor countries, the residual health problems of low income countries are even more stark and unacceptable. It is now widely reported, for example, that some 10.5 million children under five die every year from diseases that could be easily prevented and at a relatively low cost. In large part this is because around 27 million children below one year of age as well as 40 million pregnant women worldwide are still overlooked by routine immunization programmes that could save many lives.¹⁶ AIDS is killing some 3 million persons per annum even though many of the drugs that could reduce this number are known to be effective.

It is these failures above all others that creates the highly publicised crusades for the richer countries to provide greater assistance than they do already to eliminate those cause of ill health that are resolvable using the technical solutions that are already available to us. But regrettably the common sense logic that underlies these crusades is less easily translatable into effective action on the ground. The greatest failure may not lie with the medical technology and know-how but rather in the aid-technology that is needed to translate the medical know-how into results¹⁷.

¹⁴ Armstrong, Martin

¹⁵ Lomborg [2001] pg 56

¹⁶ UNICEF, *Annual Report, 2005*, UN, New York

¹⁷ William Easterly [2006] has recently elaborated on this matter in some detail. In his Ch. 7 he cites numerous examples of the types of things that go wrong. For example.... “*Studies in Cameroon, Guinea, Tanzania, and Uganda estimated that 30 to 70 percent pf government drugs disappeared before reaching the patient. In one low-income country, a crusading journalist accused the ministry of health of misappropriating fifty million dollars in aid funds. The ministry issued a rebuttal: the journalist had irresponsibly implied that the fifty million dollars had gone AWOL in a single year whereas they had actually misappropriated the money over a three year period.*” (pg 259)

4.5.4: Example 4 - Food and Nutrition

Successes

The Malthusian proposition that increasing numbers of persons to feed would eventually out-run the capacity of the planet to produce adequate food, is one of the best known and most controversial of all propositions in development economics. The proposition is examined in more depth in Chapter XXX. Although Malthus' ideas retain a strong body of adherents even to this day, the evidence from the modern era of growth since 1950 largely rejects the central proposition that he expounded. Population has more than doubled since 1960 but global food production has increased much faster than this. As a result the average person on the planet has significantly more to eat and food is generally cheaper in real terms than it was fifty years ago – the general food shortages forecast by the Malthusian model have not occurred and hence food prices have not risen in spite of much higher food demand. Will that situation change in the future as some pessimists predict? Possibly yes – but let us here stay with the progress achieved to date.

As is the case with per capita incomes, food availability consumption levels are unevenly spread across countries. So whereas the average intake of calories in the developed world is now over 3,200 per person per day, the corresponding figure for developing countries on average is 15% lower at around 2700 calories per day. *However, it is significant that the developing country average figure is almost equal to the calorific intake of the typical rich country person back in 1960.*¹⁸ This is possible because the growth of the calory intake of the poorer countries has grown significantly faster in the intervening 40 year period: by 38% as against the global average of 24%. Hence from a level of around 1900 calories per day back in 1960, the developing countries on average today enjoy the 2,700 average intake of calories referred to above.

This has been possible not least because of the impressive *tripling* of food production in developing countries since 1961. FAO data show that the production of agricultural crops *per capita* in developing countries has gone up by 52% overall since 1961, with even faster gains for some individual products: e.g. 122% in the case of meat.

Hence although malnutrition is still widespread (see below), it is a remarkable fact that in the period 1971 to 2000, an overall population increase in the developing world of 2,120 million people was associated with a *decline* in the numbers of persons facing starvation from 920 million to around 792 million. Putting it another way, the world succeeded in providing adequate food for an *extra* 2,248 million persons (2120 + 920-792) during that 30 year period¹⁹

Failures

However, progress in feeding people follows the same sort of pattern that we have already seen with indicators such as life expectancy and literacy. While the general record of progress has been impressive, many specific countries have failed to participate fully if at all in that progress. Hence malnutrition is still widespread in many of the poorer countries and starvation²⁰ is still all too common. The World Food

¹⁸ FAO database. <http://apps.fao.org> cited in Lomborg [2001]pg 61

¹⁹ Data from the US Bureau of the Census (source: www.census.gov)

²⁰ "starvation" is defined in the UN data as a situation where a person has insufficient food to perform even light physical activities.

Programme in its *Annual Report* for 2005²¹ indicated that the number of people who are chronically hungry has risen since 1995 and now stands at over 850 million of whom some 300 million are children – clearly an unacceptably high number in this age of general prosperity. An estimated 25,000 people die from hunger and poverty every day of every year.

The problem of ongoing malnutrition in a world that has dealt generally quite well with the problem of food availability is usefully disaggregated into that part of the problem which is due (i) to periodic crisis factors – natural disasters and conflict – and that part due to (ii) the more enduring problem of food failure that is associated with endemic poverty and not with periodic crisis.

In recent years, the crisis aspects of the food problem have been associated with the Indian Ocean tsunami of December 2005 that affected countries as far a field as Sri Lanka, Indonesia, the Maldives, Thailand and even Somalia; the devastating earthquake in the Kashmir region of Pakistan in 2004; a chronic locust invasion and drought in Niger in the same year; a long sustained drought in Kenya; and floods in West Bengal and in Western Bangladesh in earlier years. The conflict issues have affected food availability for many millions especially in the Darfur region of Sudan and in neighbouring Chad, as well as in Afghanistan, Sierra Leone, in Rwanda and the Congo and the Horn of Africa. For the most part these problems though severe and difficult to solve when they occur do not fundamentally invalidate the more positive “the cup is half full” view of the global food problem.

This is less true of the ongoing failures of food supply and nutrition in some specific countries. Sub-Saharan Africa is once again the most serious and sustained outlier. Its agricultural yields and its use of productivity-enhancing fertiliser have lagged very seriously behind those seen in the poorer parts of Asia. So whereas in the early 1960s the typical African had access to the same per capita daily intake of calories as the typical Asian (over 2,000 calories per day), a very substantial gap has now emerged as Asian yields and outputs have expanded rapidly whereas those in African have grown only slowly if at all. The technical analysis seems to indicate that Africa’s peasant farmers have the potential to produce far more food than they do currently and to feed their rising populations. The failures to do in some countries lies more with the political will to address endemic poverty and to enact the various inter-related policy actions that can raise the incomes and the productive power of the majority of people.²²

Overall, there is nothing to boast about in a situation where many millions of people are still suffering serious malnutrition and even starvation. But the fact that the numbers of people in this condition are far lower than was the case some 40-50 years ago (in spite of a much larger global population), does suggest that the food problem can be resolved and that the inherent extreme pessimism of the Malthusian position has so far proved unfounded.

4.6: Assessing Progress using the Human Development Index

As was explained in Chapter 3, the UNDP’s Human Development Index provides a useful complementary measure of development to the GDP aggregates that we have

²¹ World Food Programme, *Annual Report*, 2005. Accessible via www.wfp.org

²² See for example, UN, *UNDP Human Development Report*, New York, 1997

mainly used. The UNDP now publishes time series of the HDI for each country. These enable us to assess development progress in relation to the composite of three indicators that constitute the index. The record on this basis is shown in Table 4.2 below.

Table 4.2: HDI Tendencies 1975-2001²³

	No of Countries included	Average Rise in HDI 1975-1991	No. of Countries seeing <i>Long-Term</i> decline in HDI 1975-2001	No of Countries seeing <i>Short-Term</i> decline in HDI 1991-2001	No of Countries excluded through lack of data
<i>High Development Countries</i> <i>Human</i>	47	7.9 percentage points	1	2	8
<i>Medium Development Countries</i> <i>Human</i>	61	10 percentage points	7	11	25
<i>Low Development Countries</i> <i>Human</i>	30	6.7 percentage points	4	9	4
Totals	138		12	22	37

It is noted that in all three categories of countries distinguished by the UNDP, there have been significant long-term gains in human development as measured by the HDI. These gains have not applied to all countries. The gains have ranged from 6.7 percentage points on average for the countries scoring “high” on the indicator to 10 percentage points on average for the low and medium HDI countries respectively.

As with the GDP measure of development, we can see that a few countries have gone backwards since 1975 in terms of human development (see column 4 in the table). But the number of such countries is relatively small – only 12 countries out of the group of 138 countries for which the data are available. *Easily the most important category of long term losers are the transition countries with the most significant cases being Russia, Ukraine and Romania.* In fact all 8 of the losers amongst the category of High and Medium HDI countries as shown in column 4 and rows 1 and 2 are European and Central Asian transition countries. When we add in the four long term losers from the Low HDI category we add Zimbabwe, Tanzania, Zambia and the Democratic Republic of Congo.

Significantly 126 of the 138 countries for which the HDI comparisons are possible have seen improvements in human development measured in this way in the period since 1975. This somewhat mitigates the disturbing reality that the short-term record since 1990 was less good. Indeed the 1990s was a difficult decade for rather more countries: 22 countries saw declines in human development in the shorter period

²³ Notes to table. For most countries the long term changes are calculated by comparing the 1975 HDI value with that for 2001. For a total of 39 countries data was not available for as far back as 1975. In these cases the point of comparison started with 1980 (15 countries); 1985 (9 countries), or 1990 (15 countries). The 37 countries not include in the table involved cases where HDI numbers were only available for the period 1995 to 2001

from 1990 to 2001 but again the majority of these (13 countries) are to be found in the high and medium HDI groups rather than in the lowest (9 countries).

It is encouraging also to note the number of graduates there have been from either the Low or the Medium human development groups into the next higher group. Specifically, 12 countries have moved from Low to Medium in the longer term period since 1975 covered by Table 4.2 (i.e. have surpassed a HDI value of 0.5). A further 15 countries have moved from the Medium to High category in the same period (i.e. they have surpassed a HDI value of 0.8).

4.7: So Have Income Levels Converged?

In Part 2 of this book we will look in depth at the way in which economists theorise about and model the processes of economic growth. One of the important insights that will emerge from that will relate to different concepts of “convergence” between relatively rich and relatively poor countries. The central question relates to whether the growth process causes a natural closing of income (and other) gaps of the type discussed earlier in this chapter. Here we merely look at what the long- period data can tell us about this question.

As noted earlier, if poor countries are to close income (or other) gaps with rich countries, it is mathematically necessary for their rates of growth to be superior to those of the richer countries. We noted also that we can examine this by comparing data of (i) the initial income levels of each country in some base year such as 1950 with (ii) the average growth rate of, for example, per capita income achieved from 1950 to a final year such as 1998. Repeated below is Equation 4.1. In this relationship, we would need the coefficient “ β ” to be negative to show convergence.

$$Y_g = \alpha + \beta Y_b \dots\dots [4.1]$$

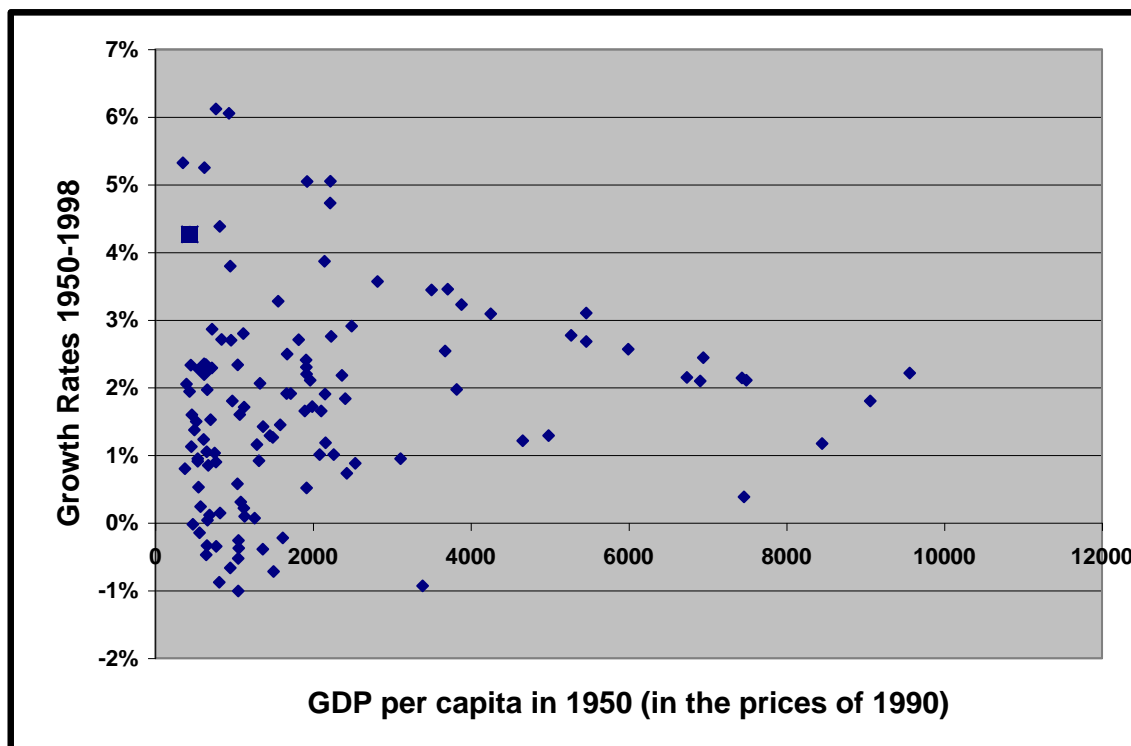
where Y_g is the growth rate of income per capita from, say, 1950 to 1998 and

Y_b = the per capita income in the base year of 1950.

Figure 4.8 below tests this relationship for that period for all countries for which the relevant data are available. Specifically, using the data set from Angus Maddison (2002) already referred to, we can plot the two key variables in Equation 4.1 for the period from 1950 to 1998 using the PPP per capita income data. This is done in Figure 4.8 that displays data for some 120 countries.²⁴

²⁴ it excludes just three of the countries from Maddison’s data series namely three middle eastern countries that figure prominently among the richest group of countries in the base year of 1950 when the incomes of that year is calibrated in the prices of 1990.

Figure 4.8: Income Convergence 1950-1998 (Unadjusted Data)



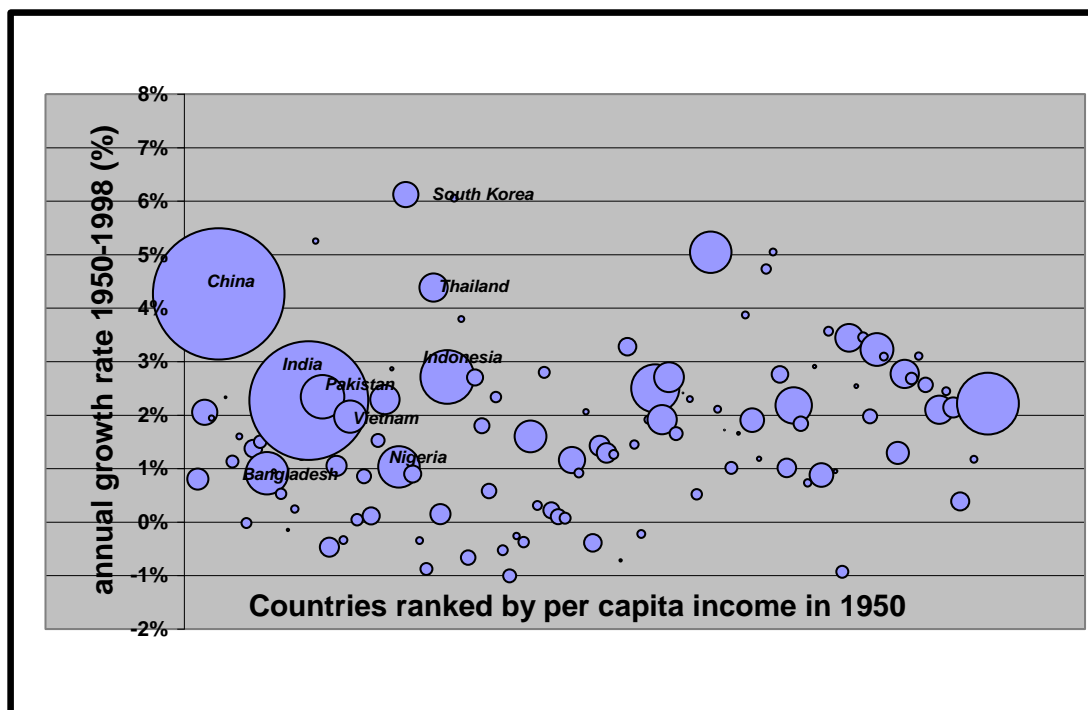
The scatter shows what we might expect based on the comparisons already provided in this chapter. The lower income countries of 1950 vary greatly in the growth rates that they have achieved through 1998 both in relation to each other and in relation to the world's richer countries. There is no suggestion in the data that the poorer countries of that era grew **generally** faster than the average but many of them certainly did achieve that.

Let us check this out a bit more precisely by calculating the average growth rate (simple arithmetic mean) for all 120 countries. This was 1.75% averaged over this 48 year period. For the 20 richest countries in 1950, the corresponding average was 2.2%. Visual inspection shows that around 40 of the poorer developing countries in the chart achieved an average growth better than the overall for the richest 20 countries: some by a large margin. But in spite of this the data as a whole and based on simple averages indicate that the convergence of incomes failed to be achieved over the 49 year period covered by the data.

However, this result based on a simple comparison of average growth rates turns out to be very misleading. We can get a much better perspective on this issue of convergence by showing the same data but now with the added information of the population numbers in each of the countries. This is done in Figure 4.9 using the bubble sizes to indicate population numbers. This shows very clearly that *most of the world's most populous poor countries clearly achieved growth rates that exceeded those both of many richer economies and of the global average of 1.75%*. The examples of this include China, India, Pakistan Indonesia, Korea and Thailand.

Overall, in the large population economies that account for almost half of the world's total population and much more than half of its poorest persons, growth rates easily bettered those of the richest countries.

Figure 4.9: Income Convergence 1950-1998 recognising Population Size



This is an extremely important conclusion – albeit one with a strong Asian label attached - and one which confirms the insights that we obtained from our earlier region-by-region analysis (see Figures 4.3 to 4.6 inclusive). It is also a conclusion that has been insufficiently represented in debate until quite recently. It turns out that whereas Baumol's misleading early results relied too much on a few industrial economies, the subsequent results gave insufficient weight to the relatively successful large-population countries especially in East Asia. The earlier and more negative results about the failure of convergence (as replicated in Figure 4.8 above) depend disproportionately on the poor record of many *smaller* developing countries. The new chart shows that most of the poor countries of 1950 that fell short of the growth rates needed for convergence are far smaller countries in population terms. The notable exceptions are Bangladesh and Nigeria.

But one final word of warning is in order. We saw that in the long sweep of history from 1000 AD to the present, there have been huge ebbs and flows in the relative prosperity levels of different regions of the world: Asia declining dramatically for example relative to Western Europe and the USA but then recovering significantly at the end of the C20th. For most of that period there has obviously been some systematic tendency for the *divergence* of incomes as between the more successful countries and today's poorer countries. That is for the obvious reason that all countries started out in 1000 AD as poor, and the more successful countries have been able to open a gap relative to the less successful. Most modern studies of the convergence process and our own simple assessment in Figure 4.10 cover only a relatively small span of 50 years at the end of the last millennium. It is hard to be certain that what we observe in those comparisons is indicative of tendencies that will

persist rather than being replaced by opposing tendencies in the longer run of history.

4.7 The Millennium Development Goals – Targets for 2015

Finally in this Chapter we turn to what has become, since the turn of the Century, the most important benchmark of economic and social development in poor countries, namely the set of so-called Millennium Development Goals (MDGs).

Specifically, on the 8th September 2000, the General Assembly of the United Nations approved the United Nations Millennium Declaration. This in turn established certain Millennium Development Goals (MDGs) the chief amongst which was the resolution to “*halve, by the year 2015, the proportion of the world’s people whose income is less than one dollar a day and the proportion of people who suffer from hunger and, by the same date, to halve the proportion of people who are unable to reach or to afford safe drinking water.*”

This Resolution is probably the most important UN resolution about the development of poor countries since the famous aid target resolution in the Pearson Report of 1969 as re-visited by the 1980 Brandt Report²⁵. Since its promulgation in 2000, the MDGs have been cast as a set of mainly numerical targets. A number of high profile international events have gradually refined the concepts of the targets and how to achieve them. In particular, in 2005 the UN set up the independent advisory panel known as the Millennium Development Project which was launched by the publication of a blue-print document entitled *A Practical Plan to Achieve the Millennium Development Goals* (UN, 2005) lead authored by the Colombia professor Jeffrey Sachs who wrote his own book – *The End of Poverty* (Sachs, 2005) – in the same year.. In the intervening years, International development agencies such as the UNDP and the World Bank have established systematic monitoring arrangements for the targets. Most multilateral and bilateral international donor agencies have espoused the targets and have begun to use them as the focal points for defining and assessing their own aid programmes. Much of the writing on the progress of the development effort in poorer countries is increasingly recast in terms of progress towards attaining the MDGs.

Box 4.8 lists the **seven** main MDGs including the specific measurable indicators that are being used to assess progress. There is also an **eighth** target (not shown in Box 4.8) that relates to the need for greater international cohesiveness in the management of foreign aid. Several of these targets relate to the four selected aspects of social progress that we used earlier in this chapter to discuss the effects on people of the impressive income gains of the past century: namely life expectancy, education, health and nutrition. So with no real loss of continuity, we can use the broader set of concepts and indicators included as the MDGs to look more comprehensively behind the GDP and HDI aggregates to see how these important dimensions of peoples’ lives are being altered by growth or the lack of it.

²⁵ Lester B Pearson (Chairman), *Partners in Development, Report on the Commission for International Development*, World Bank, September 1969. This report marked the major re-orientation of aid policy sought by Robert McNamara when he was appointed President of the World Bank in 1968. He recruited Lester Pearson to conduct a “grand assize” of the first 20 years of official development assistance. (see Riddell(2007) for more details. The next major exercise in a similar vein was then chaired by former German Chancellor Willy Brandt and published in 1980 with the title *North-South: A Programme for Survival*.

The MDG initiative is widely monitored and especially by the UNDP and the World Bank. Both organisations have also developed innovative graphical techniques to present large amounts of complex information. We make use of several of their more visual graphical approach in the paragraphs that follow.

Here we merely provide examples of the types of issue and trends that are being thrown up by the new emphasis on MDGs. Readers are invited to visit the key web sites that monitor the MDs in order to obtain a more complete and up-to-date picture of the progress achieved or the lack thereof in some cases. Examples include www.worldbank.org where you can find atlas-style representations summarising the progress on each of the MDGs; www.unicef.org/statistics that offers MS-Excel downloads of key indicators by country with considerable detail of indicators pertaining to children and their health characteristics; and www.undp.org for a wide range of data and discussion about the indicators and progress towards meeting them.

Box 4.8: The Millennium Development Goals (MDGs)

Goals and Targets	Indicators
Goal 1: Eradicate extreme poverty and hunger	
Target 1: Halve, between 1990 and 2015, the proportion of people whose income is less than one dollar a day	Proportion of population below \$1 per day Poverty gap ratio [incidence x depth of poverty] Share of poorest quintile in national consumption
Target 2: Halve, between 1990 and 2015, the proportion of people who suffer from hunger	Prevalence of underweight children (under-five years of age) Proportion of population below minimum level of dietary energy consumption
Goal 2: Achieve universal primary education	
Target 3: Ensure that, by 2015, children everywhere, boys and girls alike, will be able to complete a full course of primary schooling	Net enrolment ratio in primary education Proportion of pupils starting grade 1 who reach grade 5 Literacy rate of 15-24 year olds
Goal 3: Promote gender equality and empower women	
Target 4: Eliminate gender disparity in primary and secondary education preferably by 2005 and to all levels of education no later than 2015	Ratio of girls to boys in primary, secondary and tertiary education Ratio of literate females to males of 15-24 year olds Share of women in wage employment in the non-agricultural sector Proportion of seats held by women in national parliament
Goal 4: Reduce child mortality	
Target 5: Reduce by two-thirds, between 1990 and 2015, the under-five mortality rate	Under-five mortality rate Infant mortality rate Proportion of 1 year old children immunised against measles
Goal 5: Improve maternal health	
Target 6: Reduce by three-quarters, between 1990 and 2015, the maternal mortality ratio	Maternal mortality ratio Proportion of births attended by skilled health personnel
Goal 6: Combat HIV/AIDS, malaria and other diseases	
Target 7: Have halted by 2015, and begun to reverse, the spread of HIV/AIDS	HIV prevalence among 15-24 year old pregnant women Contraceptive prevalence rate Number of children orphaned by HIV/AIDS
Target 8: Have halted by 2015, and begun to reverse, the incidence of malaria and other major diseases	Prevalence and death rates associated with malaria Proportion of population in malaria risk areas using effective malaria prevention and treatment measures Prevalence and death rates associated with tuberculosis Proportion of TB cases detected and cured under DOTS (Directly Observed Treatment Short Course)
Goal 7: Ensure environmental sustainability	
Target 9: Integrate the principles of sustainable development into country policies and programmes and reverse the loss of environmental resources	Proportion of land area covered by forest Land area protected to maintain biological diversity GDP per unit of energy use (as proxy for energy efficiency) Carbon dioxide emissions (per capita) [Plus two figures of global atmospheric pollution: ozone depletion and the accumulation of global warming gases]
Target 10: Halve, by 2015, the proportion of people without sustainable access to safe drinking water	Proportion of population with sustainable access to an improved water source
Target 11: By 2020, to have achieved a significant improvement in the lives of at least 100 million slum dwellers	Proportion of people with access to improved sanitation Proportion of people with access to secure tenure [Urban/rural disaggregation of several of the above indicators may be relevant for monitoring improvement in the lives of slum

4.7.1: Target 1: Halving the Numbers in Extreme Poverty

Poverty and the numerical approaches to measuring its extent is the subject of detailed scrutiny in Chapter XXX below. The MDG target in this case is defined (crudely) by merely counting the number of people in a country living on less than \$1 per day and expressing this number as a percentage of total population. We will look at more sophisticated measures in Chapter XXX. The crude measure is used here because it is the only one that can be measured with some degree of reliability for almost all countries.

Figure 4.10 (a graphic taken from the UNDP *Human Development Report*) shows the same significant variation on this indicator that we found earlier in examining GDP growth rates. Poverty in 1990 was *least bad* in the Arab states followed by the countries of Eastern Europe and the FSU, by Latin America and then by East Asian countries. Poverty incidence was *far worse* in Sub-Saharan Africa and South Asia. Broadly speaking this ranking of distress follows inversely the ranking of countries according to their levels of per capita income as shown in Chapter 2.

Figure 4.10: Progress with MDG 1: Halving Numbers in Poverty

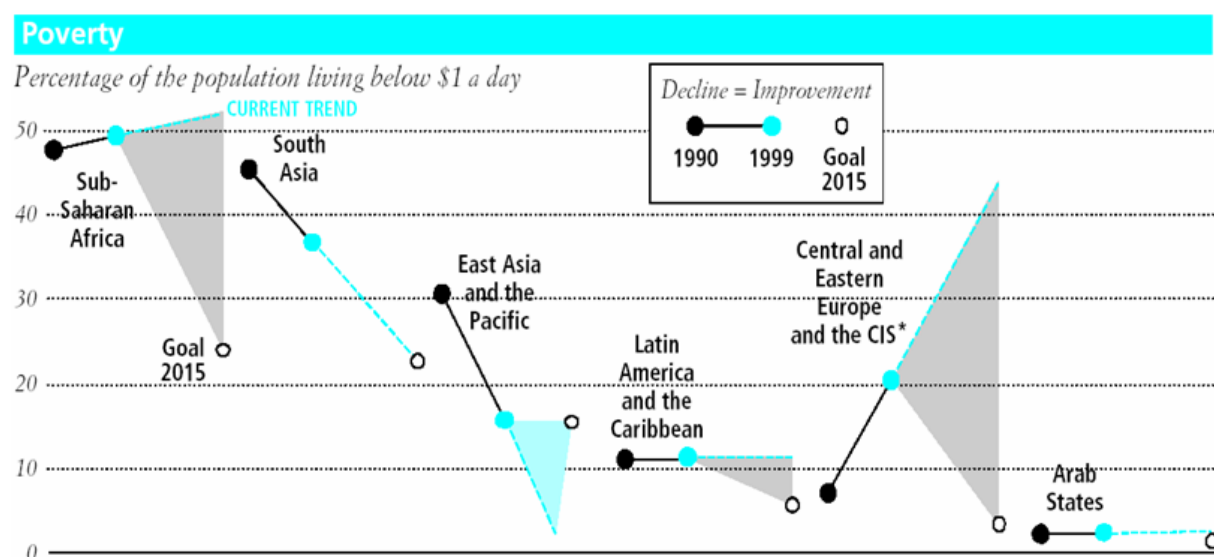


Figure 4.10 illustrates many of the same ambiguities about global development progress in the short term that we discussed above for the longer term. In the two poorest regions of the world, namely Africa and South Asia, the records on poverty reduction went in opposite directions in the 1990s. Africa saw an increase in the proportions of poor to almost 50% by 1999 whereas South Asia saw a decline to well under 30%. This means that Africa looks increasingly *unable* to meet the target established for 2015 (a proposition indicated in its scale by the shaded triangle) while South Asia has some prospect of reaching its own slightly more ambitious target. (note that both regions have similar targets in the low 20% area).

Between 1990 and 1999, a second group of countries namely those in Eastern Europe and the FSU have also moved in the wrong direction in relation to the target. The dismal post-Soviet growth record has resulted in the poverty incidence more than *doubling* in the 10 years in that region. In the case of Africa sustained low

growth for many centuries had already resulted in the *highest absolute* incidence of extreme poverty to around 50%. Figure 4.10 shows a sharp contrast with this for the transition countries. In spite of their dreadful economic record in the 1990s, the transition countries in Europe have a poverty incidence that is in a different league from Africa with around 20% of their populations on average being in poverty. In other words their *actual* poverty level today is about equal to the 2015 *target* poverty level of Africa and Asia.

The other dramatic story in the figure relates to East Asia. Here the relatively high poverty incidence of 1990 (30%) was already reduced dramatically by 1999 to around 16%. The successful growth record in terms of GDP as shown earlier clearly paid dividends in terms of achieving the MDG targets. So, on average these countries have almost attained the MDG target set for 2015. However, this success rests very largely on the exceptional performance of the largest East Asian economy namely China. The disaggregation of the data in Figure 4.10 would show much weaker performance in other countries (readers are invited to take a look at some sample countries using the web sites cited earlier)

4.7.2: Target 5 - Reducing the Incidence of Child Mortality

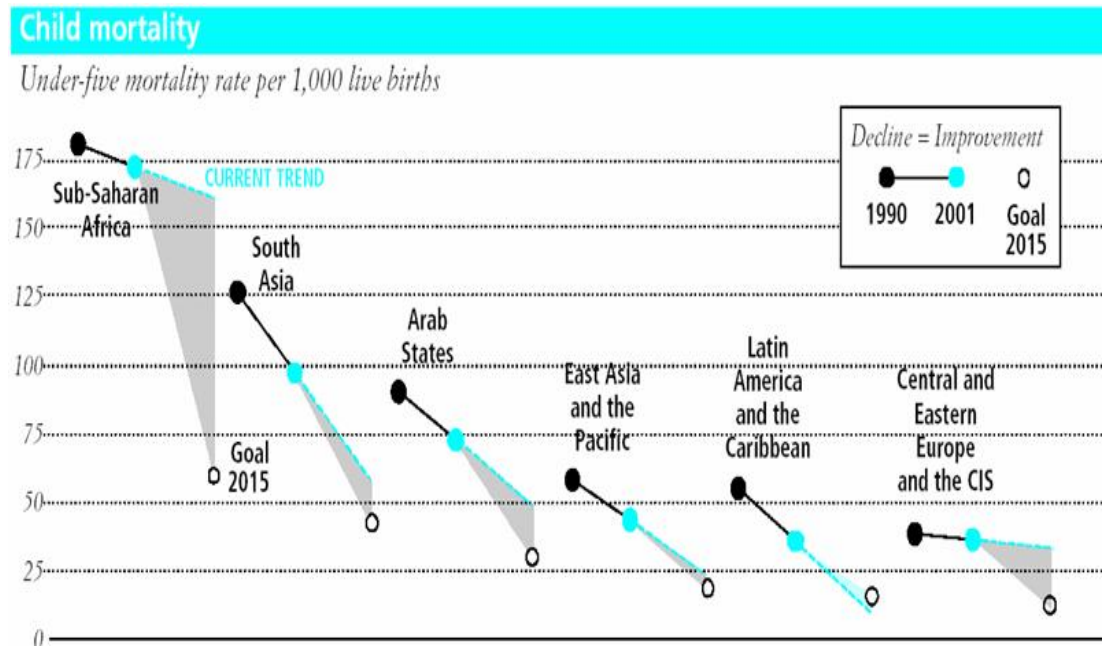
The background to this fourth MDG goal is that every year nearly 11 million young children die before their fifth birthday, many, as we saw earlier from illnesses that could be prevented at a low absolute cost. That figure represents a reduction from the 1980 level of 15 million but is still far too high.

The main measurable target here involves reducing by two-thirds, the under-five mortality rate. This is defined in terms of the standard measure of child mortality namely the number of under-5 deaths per 1,000 of live births.

Figure 4.11 shows the UNDP's diagrammatic description of how much progress since 1990 has been achieved relative to that target.

Again we see how the intensity of the problem links up with levels of income. The two poorest regions as identified by reference to GDP per capita in Chapter 2 () have by far the worst incidence of child mortality. These are Sub-Saharan Africa and South Asia where the child mortality rate is in excess of 100 per 1000 of live births in both cases. Some progress on meeting the MDG target is evident in both regions but especially in the case of Africa is far too slow to offer much hope that the target will actually be attained by 2015. So once again we see the large shaded triangle for Africa which indicates the scale of the shortfall relative to present trends. For South Asia the corresponding triangle has a much smaller area and the prospects for meeting the 2015 target are much better.

Figure 4.11: Progress with MDG 5: Two Thirds Reduction in Child Mortality



By contrast in the other four regions shown in Figure 4.11, the 1990 levels of child mortality were already lower than the 2015 targeted levels set for South Asia and Africa. Progress since 1990 in further mitigating the problem is evident in three of those four regions and especially in East Asia and in Latin America where the child mortality rates are significantly lower than was the case in the 1950s. The problematic areas in relation to this goal are Africa (from a traditionally high rate of child mortality) and Eastern Europe and the FSU (from a traditionally much lower rate). Once again we see the clear evidence that sub-standard GDP growth rates correlates quite closely with trends in an important social indicator.

Similar analysis can be conducted for each of the other MDG goals and targets. The reader is invited to do some of this by referring to the UNDP or World Bank web sites where most of the necessary data can be found.

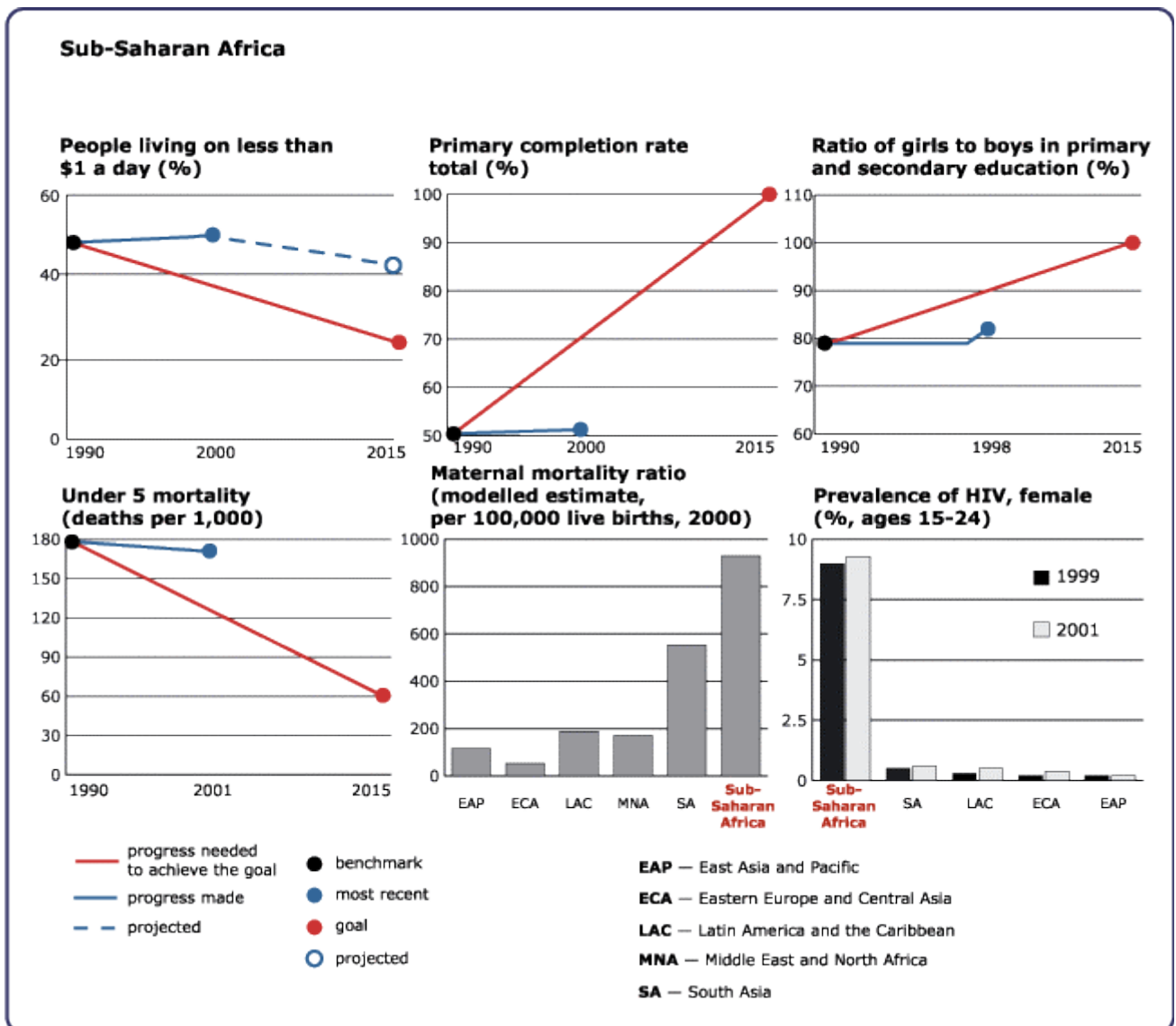
4.7.3: A Look at the Mainly Poor Regions

Comparisons across regions can be undertaken in relation to all of the MDGs. Readers are invited to consult the web sites to see the patterns that emerge from such comparisons. We conclude our own illustrative discussion of this topic by a closer look at the situation in the most vulnerable geographic regions and show how they compare with the rest of the developing world.

Figure 4.12 which is extracted from World Bank sources shows six of the MDGs for Sub-Saharan Africa including the generally less than favourable tendencies that have been apparent in the period since 1990. For two of the indicators (maternal mortality and the incidence of HIV/AIDS) it also shows the comparisons with other developing country regions.

Clearly the situation in Sub-Saharan Africa is particularly bad and shows degrees of difference with other poor regions in terms of the two MDG indicators that are highlighted. The problems of maternal mortality and HIV/AIDS, for example, are by no means trivial in the poorer regions of the world. But the *absolute* severity of these and other problems of deprivation in Africa truly make this a region for very special attention.

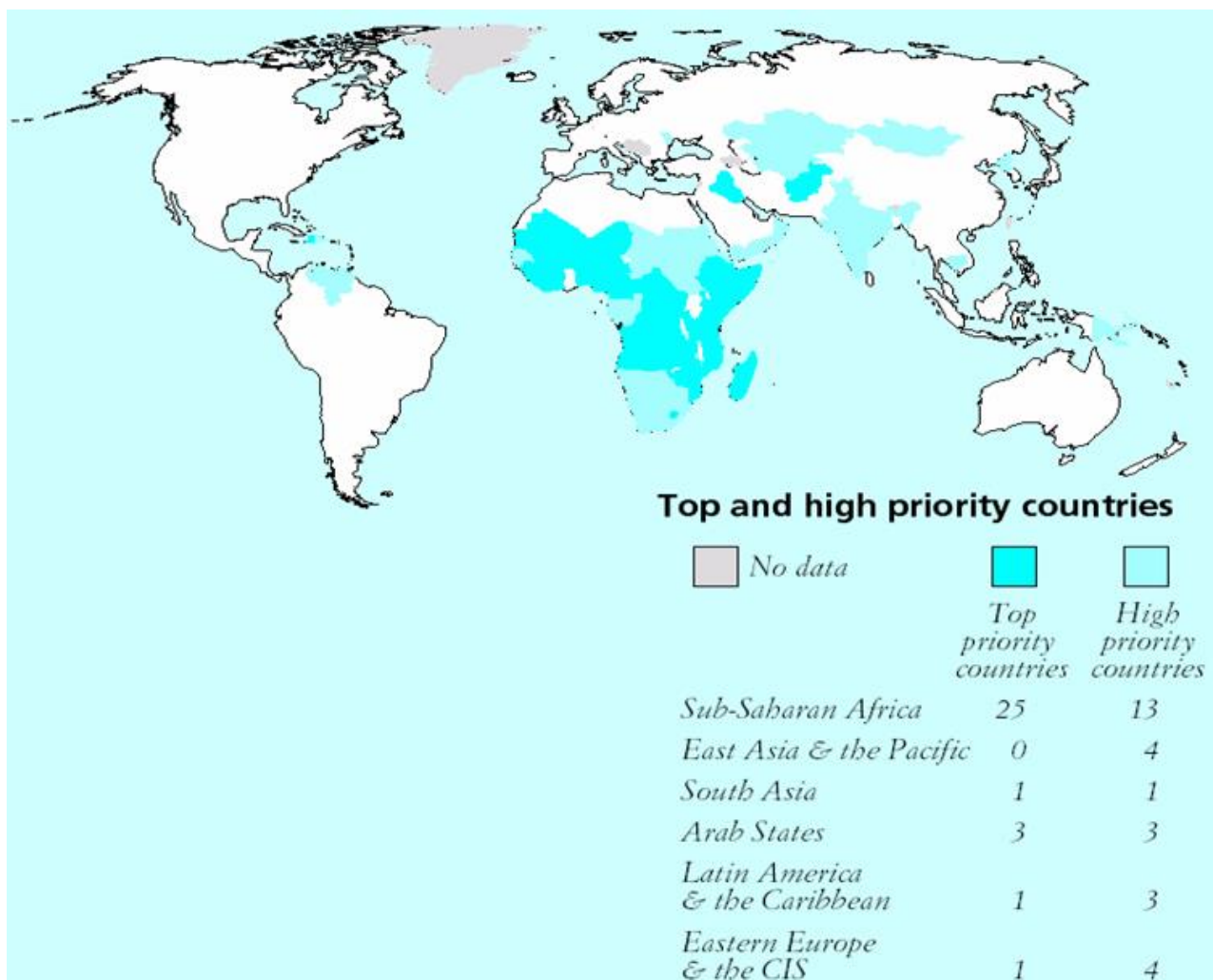
Figure 4.12: Selected MDGs in Sub-Saharan Africa



4.7.4: Finally a Look at the most Critical Country Cases

Within Africa and within some of the other poorest regions of the world, there are specific countries that the MDG indicators mark out as being in particular need of urgent corrective action if the 2015 targets are to be even approached let alone met in full. The UNDP's *Human Development Report*, 2003 identified 31 "high priority countries" that are in crisis in relation to all or most of the MDGs. It is on these cases, the UNDP argues, that the world's attention and resources must focus in the next few years if the targets are to come anywhere close to being met. As Figure 4.13 from the UNDP's 2003 report shows, 25 of these countries are in Sub-Saharan Africa: the map in Figure 4.13 shows their location. In addition the UNDP identifies 28 "top priority countries". In these cases, some progress is evident but it is happening too slowly in relation to a significant number of the MDGs for the 2015 targets to be met in full. As figure 4.13 indicates 13 of these countries are also in Sub-Saharan Africa.

Figure 4.13: The Main Problem Countries



4.8: Main Issues and Conclusions

This Chapter has assessed the performance of all of today's developing countries over both long and shorter periods of history. It has revealed a remarkable progress based on the huge acceleration of economic growth that began globally when the "sleeping giant" of global development awoke sometime in the 1800s. During that first spurt of growth many of the established relativities in economic prosperity between countries were shaken up with Europe and countries of newer settlement in particular overtaking the considerable early leadership of the Asian economies. This experience shows the potential for economic development to begin and extend its scope even in countries that formerly were relatively backward.

In the second part of the C20th this pattern has been seen again but this time with many countries that we still label as "developing countries" participating very successfully in the new spurts of development that have occurred. Contrary to many of the more pessimistic assessments, most major regions of the developing world and most geographical groups of developing countries have seen positive development outcomes in the past fifty years with per capita incomes rising very substantially.

It is particular relevant to any assessment of global performance – and to the case for a broadly optimistic view of the future - that the world's most populous countries namely China and India have been amongst these reasonably successful countries. For most but certainly not all countries, the spurts of growth attained since 1950 have been significantly faster than the equivalent rises in incomes seen in Western Europe after the industrial revolution that began at the end of the C18th. Historians label this a "golden age". So the broad-based successes of most developing countries in exceeding those growth rates for extended periods in more recent times must surely be adjudged a success. Something is (was) being done right!

However, for some significant regions of the world, it is evident that performance especially in the last two decades of the C20th took the gloss of what had earlier been apparently successful development records. This is most dramatically true of the countries of Eastern Europe and the former Soviet Union but it is true also of many countries in Latin America and most countries in Sub-Saharan Africa. The time series records in these three very different regions of the world provide us with many different and important lesson about *appropriate policies and institutions* for development that we will exploit more fully in Part IV of the book.

In general the remarkable growth record of the period since the early 1800s and especially in the past half century since 1950 have brought about improvements in social indicators and the quality of life that would have been thought inconceivable a century ago. In some cases, such as life expectancy, these changes have brought the developing country performance close to that achieved by the richer countries only in the second part of the C20th. But again there are important exceptions with chronic shortfalls relatively to what is achievable especially in large parts of Sub-Saharan Africa and in South Asia.

These deficits of performance have quite rightly become an increasing focus of international concern and international remedial efforts in the new millennium. The new millennium provided an opportunity to codify these concerns into formal targets for the year 2015. As we move forward the Millennium Development Goals will be seen to be an increasingly important focus of a large part of the development debate. Certainly they help us to identify both the specific issues and also the particular countries where previous models of growth have failed poor people most acutely.

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