17 Approaches to growth

Learning objectives

- Analyse different approaches to achieving economic growth
- Assess the evidence of economic growth across countries
- Analyse the economics of developing countries
- Understand the difference between import-substitution and export-led growth
- Understand the process of transition and marketization
- Learn about the evolving international economic system
- Assess the relationship between growth and globalization

17.1 Introduction

In Chapter 16 in the textbook, we looked at the models and mechanisms of long-run growth. We will now examine different approaches to economic growth undertaken by developing and transition economies. We start with the economics of developing countries and then review the two main topics in development in the post-war period. The first is the approach to development characterized by import-substitution in Latin America and the export-oriented strategy of the East Asian 'tiger' economies. The second is the transition of formerly centrally planned economies into market-oriented ones. The examples here will focus on the gradualist approach of China versus the rapid marketization of the former Soviet Union. The chapter will conclude with a look at the international economic system, the advent of the World Trade Organization, and the future prospects of growth within the global economy.

The growth models and the simple empirical framework of growth accounting in Chapter 16 in the textbook are not able to explain comparative growth experiences. New growth theories attempt to add further dimensions to the existing theories in the hope of providing more satisfactory answers. These theories consider a myriad of factors, including rule of law, political systems, social capital, and so on. They attempt to explain differences in economic growth through a deeper set of factors. As we go through the economics of development and transition in this chapter, do bear these in mind.

17.2 The economics of development

We know that countries have not converged in growth and the world economy is characterized by vast disparities. The world economy had a GDP of $31.7 trillion in 2003 and the US accounted for over $10 trillion of that while Nepal accounted for only $5 billion. The disparities are even more remarkable when viewed in terms of GDP per capita, since a country with a large population may be expected to have a higher total GDP though the national income may be spread across a larger population.

Table 17.1 shows the figures for GDP and GDP per capita in 2003. It shows GDP and GDP per capita adjusted for purchasing power parity (PPP). Table 17.2 shows the annual average growth rate of GDP per capita from 1972 to 2002, and Table 17.3 gives the same set of statistics by groups of countries. It becomes apparent from Table 17.2 that while some countries such as China have grown well over the past 25 years, others like Ukraine have had negative growth over the same period. The picture is even clearer in Table 17.3, which shows the vast disparities between the OECD countries and the least developed countries in the world.

Poverty

The question of growth raises issues not only concerning the rate of growth, but also the level of income. From these tables, it is apparent that per capita GDP and GDP vary greatly. GDP per capita in the OECD economies is $26,298, while it is $303 in sub-Saharan Africa. Thus, the question of growth and development is often concerned with **poverty**, a measure of the number of people living below a minimum standard of living. The World Bank's measure of extreme poverty is set at $1 per day, while $2 per day captures those who live in poverty. While an average person in some countries earns more than $40,000 a year, more than half the people in developing countries, 2.8 billion people, live on less than $700 a year. Of these, 1.2 billion or one-fifth of the world's population earn less than $1 a day.

Table 17.1 GDP of the World's Economies, 2003 (in US$ billions)

Country	GDP	GDP (PPP adjusted)	GDP per capita	GDP per capita (PPP adjusted)
1. US	10 383.10	10 308.00	36006	35750
2. Japan	3 993.40	3 425.10	31407	26940
3. Germany	1 984.10	2 235.80	24051	27100
4. UK	1 566.30	1 549.10	26444	26150
5. France	1 431.30	1 601.40	24061	26920
6. China	1 266.10	5 860.90	989	4580
7. Italy	1 184.30	1 524.70	20528	26430
8. Canada	714.3	924.7	22777	29480
9. Spain	653.1	878	15961	21460
10. Mexico	637.2	904.6	6320	8970
11. India	510.2	2 799.60	487	2670
12. Korea, Rep. of	476.7	807.3	10006	16950
13. Brazil	452.4	1 355.00	2593	7770
14. Netherlands	417.9	469.9	25886	29100
15. Australia	409.4	555.7	20822	28260
16. Russian Federation	346.5	1 185.60	2405	8230
17. Switzerland	267.4	218.8	36687	30010
18. Belgium	245.4	284.9	23749	27570
19. Sweden	240.3	232.5	26929	26050
20. Austria	204.1	235.2	25356	29220
21. Norway	190.5	166.1	41974	36600
22. Poland	189	407.7	4894	10560
23. Saudi Arabia	188.5	276.9	8612	12650
24. Turkey	183.7	444.8	2638	6390
25. Indonesia	172.9	682.9	817	3230
26. Denmark	172.9	166.3	32179	30940
27. Hong Kong, China (SAR)	161.5	182.6	23800	26910
28. Greece	132.8	199	12494	18720

Country	GDP	GDP (PPP adjusted)	GDP per capita	GDP per capita (PPP adjusted)
29. Finland	131.5	136.1	25295	26190
30. Thailand	126.9	431.9	2060	7010
31. Portugal	121.6	186.1	11948	18280
32. Ireland	121.4	142.5	30982	36360
33. Iran, Islamic Rep. of	108.2	438.3	1652	6690
34. South Africa	104.2	456.8	2299	10070
35. Israel	103.7	128.2	15792	19530
36. Argentina	102.0	412.7	2797	10880
37. Malaysia	94.9	221.7	3905	9120
38. Venezuela	94.3	135.1	3760	5380
39. Egypt	89.9	252.6	1354	3810
40. Singapore	87.0	100.1	20886	24040
41. Colombia	80.9	278.6	1850	6370
42. Philippines	78.0	333.5	975	4170
43. United Arab Emirates	71.0	–	22051	–
44. Czech Republic	69.5	161.1	6808	15780
45. Hungary	65.8	136.1	6481	13400
46. Chile	64.2	153.1	4115	9820
47. Pakistan	59.1	281.3	408	1940
48. New Zealand	58.6	85.6	14872	21740
49. Peru	56.5	134.1	2113	5010
50. Algeria	55.9	180.4	1785	5760
51. Bangladesh	47.6	230	351	1700
52. Romania	45.7	146.2	2052	6560
53. Nigeria	43.5	113.6	328	860
54. Ukraine	41.5	237.3	851	4870
55. Morocco	36.1	112.9	1218	3810
56. Kuwait	35.4	37.8	15193	16240
57. Vietnam	35.1	185.4	436	2300
58. Kazakhstan	24.6	87.4	1656	5870

Country	GDP	GDP (PPP adjusted)	GDP per capita	GDP per capita (PPP adjusted)
59. Ecuador	24.3	45.9	1897	3580
60. Slovakia	23.7	69	4403	12840
61. Guatemala	23.3	48.9	1941	4080
62. Croatia	22.4	45.7	5025	10240
63. Slovenia	22.0	36.4	11181	18540
64. Dominican Republic	21.7	57.2	2514	6640
65. Tunisia	21.0	66.2	2149	6760
66. Luxembourg	21.0	27.2	47354	61190
67. Syrian Arab Republic	20.8	61.5	1224	3620
68. Oman	20.3	33.8	8002	13340
69. Libyan Arab Jamahiriya	19.1	–	3512	–
70. Qatar	17.5	–	28634	–
71. Lebanon	17.3	19.4	3894	4360
72. Costa Rica	16.8	34.9	4271	8840
73. Sri Lanka	16.6	67.7	873	3570
74. Bulgaria	15.5	56.8	1944	7130
75. El Salvador	14.3	31.4	2226	4890
76. Belarus	14.3	54.8	1441	5520
77. Lithuania	13.8	35.8	3977	10320
78. Sudan	13.5	59.5	412	1820
79. Panama	12.3	18.1	4182	6170
80. Kenya	12.3	31.9	393	1020
81. Uruguay	12.1	26.3	3609	7830
82. Côte d'Ivoire	11.7	25.1	707	1520
83. Angola	11.2	28.0	857	2130
84. Cyprus	10.1	13.8	13210	18150
85. Yemen	10.0	16.2	537	870
86. Trinidad and Tobago	9.6	12.3	7384	9430
87. Tanzania, U. Rep. of	9.4	20.4	267	580
88. Jordan	9.3	21.8	1799	4220

Country	GDP	GDP (PPP adjusted)	GDP per capita	GDP per capita (PPP adjusted)
89. Cameroon	9.1	31.5	575	2000
90. Latvia	8.4	21.5	3595	9210
91. Iceland	8.4	8.4	29749	29750
92. Zimbabwe	8.3	30.5	639	2370
93. Uzbekistan	7.9	42.1	314	1670
94. Jamaica	7.9	10.4	3008	3980
95. Bolivia	7.8	21.6	886	2460
96. Turkmenistan	7.7	20.1	1601	4250
97. Bahrain	7.7	12.0	11007	17170
98. Honduras	6.6	17.7	966	2600
99. Estonia	6.5	16.6	4792	12260
100. Ghana	6.2	43.1	304	2130
101. Ethiopia	6.1	52.6	90	780
102. Azerbaijan	6.1	26.2	745	3210
103. Uganda	5.8	34.1	236	1390
104. Congo, Dem. Rep. of the	5.7	33.7	111	650
105. Bosnia and Hercegovina	5.6	–	1362	–
106. Paraguay	5.5	25.4	1000	4610
107. Nepal	5.5	33.1	230	1370
108. Botswana	5.3	14.0	3080	8170
109. Senegal	5.0	15.8	503	1580
110. Gabon	5.0	8.7	3780	6590
111. Bahamas	4.8	5.1	15797	16690
112. Albania	4.8	15.2	1535	4830
113. Mauritius	4.5	13.1	3740	10810
114. Madagascar	4.4	12.2	268	740
115. Nicaragua	4.0	13.2	749	2470
116. Cambodia	4.0	25.7	321	2060
117. Malta	3.9	7.0	9748	17640
118. Macedonia, TFYR	3.8	13.2	1860	6470

Country	GDP	GDP (PPP adjusted)	GDP per capita	GDP per capita (PPP adjusted)
119. Zambia	3.7	8.6	361	840
120. Mozambique	3.6	19.3	195	1050
121. Occupied Palestinian Territories	3.4	–	1051	–
122. Mali	3.4	10.5	296	930
123. Haiti	3.4	13.3	415	1610
124. Georgia	3.4	11.7	656	2260
125. Guinea	3.2	16.2	415	2100
126. Burkina Faso	3.1	13.0	264	1100
127. Congo	3.0	3.6	825	980
128. Namibia	2.9	12.3	1463	6210
129. Papua New Guinea	2.8	12.2	523	2270
130. Benin	2.7	7.0	411	1070
131. Barbados	2.5	4.1	9423	15290
132. Armenia	2.4	9.6	771	3120
133. Niger	2.2	9.1	190	800
134. Equatorial Guinea	2.1	14.0	4394	29780
135. Chad	2.0	8.5	240	1020
136. Malawi	1.9	6.2	177	580
137. Fiji	1.9	4.5	2281	5440
138. Rwanda	1.7	10.4	212	1270
139. Lao People's Dem. Rep.	1.7	9.5	304	1720
140. Moldova, Rep. of	1.6	6.2	382	1470
141. Kyrgyzstan	1.6	8.1	320	1620
142. Togo	1.4	7.0	291	1480
143. Tajikistan	1.2	6.1	193	980
144. Swaziland	1.2	4.9	1091	4550
145. Mongolia	1.1	4.2	457	1710
146. Suriname	1.0	–	2199	–
147. Mauritania	1.0	6.2	348	2220

Country	GDP	GDP (PPP adjusted)	GDP per capita	GDP per capita (PPP adjusted)
148. Central African Republic	1.0	4.5	274	1 170
149. Sierra Leone	0.8	2.7	150	520
150. Belize	0.8	1.5	3332	6 080
151. Seychelles	0.7	–	8320	–
152. Saint Lucia	0.7	0.8	4124	5300
153. Lesotho	0.7	4.3	402	2420
154. Guyana	0.7	3.3	937	4260
155. Burundi	0.7	4.5	102	630
156. Antigua and Barbuda	0.7	0.8	10449	10920
157. Maldives	0.6	–	2182	–
158. Eritrea	0.6	3.8	150	890
159. Djibouti	0.6	1.4	861	1990
160. Cape Verde	0.6	2.3	1345	5000
161. Bhutan	0.6	–	695	–
162. Timor-Leste	0.4	–	497	–
163. Saint Vincent and the Grenadines	0.4	0.6	3082	5460
164. Saint Kitts and Nevis	0.4	0.6	7745	12420
165. Grenada	0.4	0.7	4060	7280
166. Gambia	0.4	2.4	257	1690
167. Samoa (Western)	0.3	1.0	1484	5600
168. Comoros	0.3	1.0	437	1690
169. Vanuatu	0.2	0.6	1138	2890
170. Solomon Islands	0.2	0.7	541	1590
171. Guinea-Bissau	0.2	1.0	141	710
172. Dominica	0.2	0.4	3438	5640
173. Tonga	0.1	0.7	1347	6850
174. São Tomé and Principe	0.1	–	326	–

Source: World Bank, *World Development Indicators*, 2004

Table 17.2 Annual average GDP growth rates, 1972–2002 (in percentages)

Country	GDP growth rate
Equatorial Guinea	12.7
China	8.2
Korea, Rep. of	6.1
Saint Kitts and Nevis	5.3
Thailand	5.2
Botswana	5.1
Singapore	5.0
Vietnam	5.0
Cyprus	4.7
Mauritius	4.6
Ireland	4.4
Hong Kong, China (SAR)	4.4
Malta	4.4
Antigua and Barbuda	4.3
Indonesia	4.2
Chile	4.1
Luxembourg	4.0
Malaysia	4.0
Bhutan	4.0
Saint Lucia	3.7
Grenada	3.7
Lebanon	3.6
Sri Lanka	3.4
Saint Vincent and the Grenadines	3.3
Dominica	3.3
India	3.3
Lao People's Dem. Rep.	3.3
Lesotho	3.2
Seychelles	3.0

Country	GDP growth rate
Cape Verde	3.0
Portugal	2.9
Norway	2.8
Belize	2.8
Egypt	2.8
Japan	2.6
Pakistan	2.6
Uganda	2.6
Spain	2.2
Oman	2.2
UK	2.1
Austria	2.1
Tunisia	2.1
Nepal	2.1
US	2.0
Finland	2.0
Germany	2.0
Italy	2.0
Israel	2.0
Mozambique	2.0
Australia	1.9
Netherlands	1.9
Belgium	1.9
Tonga	1.9
Dominican Republic	1.9
Bangladesh	1.9
Turkey	1.8
Myanmar	1.8
Swaziland	1.8
Iceland	1.7

Country	GDP growth rate
France	1.7
Denmark	1.6
Solomon Islands	1.6
Sweden	1.5
Canada	1.5
Bahamas	1.5
Colombia	1.5
Guinea	1.5
Uruguay	1.3
Morocco	1.3
Barbados	1.2
Costa Rica	1.2
Greece	1.1
Bahrain	1.1
Burkina Faso	1.1
New Zealand	1.0
Hungary	1.0
Panama	1.0
Switzerland	0.9
Mexico	0.9
Fiji	0.9
Syrian Arab Republic	0.9
Sudan	0.9
Trinidad and Tobago	0.8
Brazil	0.8
Paraguay	0.7
Guyana	0.6
Benin	0.6
Tanzania, U. Rep. of	0.6
Argentina	0.4
Jamaica	0.4

Country	GDP growth rate
Papua New Guinea	0.4
Slovakia	0.3
Albania	0.3
Jordan	0.3
Ghana	0.3
Kenya	0.3
Mauritania	0.3
Philippines	0.2
El Salvador	0.2
Vanuatu	0.2
Malawi	0.2
Ethiopia	0.2
Bulgaria	0.1
Ecuador	0.1
Honduras	0.1
Guatemala	0.1
Congo, Dem. Rep. of the	0
Senegal	–0.1
Estonia	–0.2
Algeria	–0.2
Namibia	–0.2
Gambia	–0.2
Mali	–0.2
Mongolia	–0.3
Guinea-Bissau	–0.3
Iran, Islamic Rep. of	–0.4
Bolivia	–0.4
Latvia	–0.5
Peru	–0.6
São Tomé and Principe	–0.6
Cameroon	–0.6

Country	GDP growth rate
Nigeria	–0.6
Rwanda	–0.6
South Africa	–0.7
Suriname	–0.8
Burundi	–0.9
Venezuela	–1.0
Comoros	–1.0
Romania	–1.1
Kuwait	–1.2
Togo	–1.2
Uzbekistan	–1.5
Gabon	–1.5
Angola	–1.5
Central African Republic	–1.5
Madagascar	–1.6
Niger	–1.9
Côte d'Ivoire	–2.0
Zambia	–2.1
Haiti	–2.3
Saudi Arabia	–2.5
United Arab Emirates	–2.8
Nicaragua	–2.9
Sierra Leone	–3.3
Kyrgyzstan	–3.6
Turkmenistan	–4.4
Djibouti	–4.6
Georgia	–5.2
Moldova, Rep. of	–5.4
Ukraine	–6.6
Tajikistan	–9.0

Source: World Bank, *World Development Indicators*, 2004

Table 17.3 GDP of country groups

	GDP (in US$ billions)	GDP in US$ billions (PPP adjusted)	GDP per capita (in US$)	GDP per capita in US$ (PPP adjusted)	Annual GDP average growth rate, 1972–2002
Developing countries	6189.30	19848.50	1264	4054	2.3%
Least developed countries	204.70	897.70	298	1307	0.5%
Arab states	712.30	1466.30	2462	5069	0.1%
East Asia and the Pacific	2562.60	9046.90	1351	4768	5.9%
Latin America and the Caribbean	1676.10	3796.10	3189	7223	0.7%
South Asia	757.10	3898.70	516	2658	2.4%
Sub-Saharan Africa	303.50	1157.40	469	1790	-0.8%
Central and Eastern Europe and the CIS	971.10	2914.70	2396	7192	-1.5%
OECD	26298.90	28491.50	22987	24904	2%

Source: World Bank, *World Development Indicators*, 2004

Economic growth can be associated with poverty reduction, as has been seen in Asia. In East Asia and the Pacific region, the number of poor dropped from 472 million in 1990 to 271 million in 2001. By 2015, that number should shrink to 19 million. More than half of this gain is generated by China and India, two large and successful developing countries. Indeed, the world has grown well in the post-war period, accompanied by **globalization** and increased **international trade**. It appears, however, that this rising prosperity has not benefited all. Sub-Saharan Africa has experienced negative growth in the past 30 years and is the only large region of the world where living standards and life expectancy have deteriorated. In 2000, there were 75 million more Africans in poverty than a decade before.

Human development

If poverty is defined as a level of income, then it would appear that economic growth is essential in reducing poverty. This is true to a large extent, but we must not overlook the concept of poverty as a subjective notion or one that is broader than measures of income alone. For instance, in order to create a measure of development, the Human Development Index, developed by the United Nations, looks at life expectancy, literacy or educational enrolment, and per capita GDP. In so doing, the most developed country in the world is not the US, despite it being the richest in money terms. The country with the highest level of human development is Norway. It is, however, still the case that countries which aim to raise the standards of living of its people must adopt a growth strategy.

Global application 17.1

Why has Africa grown so slowly?

While worldwide incomes have risen, the one part of the world that seems to lag behind is sub-Saharan Africa. Accounting for about 10 per cent of the world's population but situated on one of the largest continents of the world, half of the inhabitants of the 48 countries in this region are considered to be extremely poor, defined by the World Bank as living on less than $1 per day. Within the next few decades, Africa will account for the bulk of the world's poor as other developing regions, such as South Asia, begin to reduce their poverty rates. Yet, in the 1960s, Africa's future looked bright. During the first half of the twentieth century, Africa had grown considerably more rapidly than Asia. In the 1960s, following the transition uncertainties of independence after colonialism, Africa's growth between 1960 and 1973 was even faster than in the first half of the century. Political self-determination and economic prosperity appeared to be within reach. However, during the 1970s, the political and economic situation in Africa worsened as many African nations descended into dictatorships and autocracy. Since 1980, per capita GDP has declined at nearly one per cent each year and 32 countries are poorer now than in 1980.

Why has Africa grown so slowly? To answer this question, Collier and Gunning (1999) looked at a variety of factors. The explanations centre around two sets of factors, that of policy choices and exogenous 'destiny' reasons. The 'destiny' reasons focus on the importance of geographical and demographic factors which have impeded growth. The first reason is that much of the continent is tropical. This poses a challenge for Africa since it will be susceptible to diseases such as malaria and also possesses unfavourable conditions for livestock and agriculture. Furthermore, life expectancy historically has been low in a population that also has high fertility and infant mortality rates. Low life expectancy and high population growth are factors that can slow growth, but they can also be the result of low growth since poor countries suffer from inadequate health provision and children are often needed as safeguards in an uncertain economic environment. More recently in the 1980s, AIDS spread rapidly through Africa where up to a quarter of all adults are now HIV-positive in some countries, which will also reduce life expectancy and hamper labour productivity. Second, Africa suffers from poor soil quality and much of the climate is semi-arid where rainfall is subject to long cycles and unpredictability. A third characteristic is that the continent has low population density, which leads to high transport costs, high resource endowments per capita which can lead to 'loot-seeking' activities and higher ethno-linguistic diversity than other regions. The latter has been associated with the high incidence of civil war in the continent, though this is the case only in an undemocratic context. A fourth trait is Africa's colonial heritage. Africa has much smaller countries in terms of population than other regions. Very small states can be economically disadvantaged for several reasons, including the inability to spread the fixed costs of government, lack of economies of scale, and they are more likely to be perceived as risky by investors.

There are also external 'destiny' factors, such as the fact that even though Africa is better situated than Asia for developed economy markets, most Africans live further from the coast and navigable rivers and thus face higher transport costs of exports. Much of the population also dwell in land-locked countries so that distance is compounded by borders which also increase export costs. Typically, growth regressions find that being landlocked reduces growth by around half of one per cent. Also, Africa's exports are concentrated in a narrow range of commodities with volatile prices that have declined since the 1960s. Furthermore, some resource-rich countries, such as oil exporters, have witnessed an appreciation of their exchange rates which have reduced the competitiveness of manufactures.

Policy also matters. For much of the post-colonial period, African countries have been similar to

Global application 17.1 (continued)

autocracies whereby government has been captured by the educated, urban-resident population with few agricultural interests. The public sector has been expanded, while imposing controls on private activity. Public sector expansion was reconciled with limited tax revenue by reducing non-wage expenditure and wage rates. This led to a low quality of public services and thus Africa suffered from the paradox of high public expenditure but poor public services. This meant unreliable transport and power, inadequate telecommunications networks and a poor legal system. For instance, three-quarters of the capital stock held by private firms in Nigeria were found to be for own power generation. Poor public services delivery also affected households through inadequate education and health services, which hampered investment in human capital. Since the political base of the governments was urban, the urban bias in development meant that public sector research into improving agricultural productivity was neglected. And government intervention frequently hampered markets, including heavily regulating the financial sector and directing bank lending to 'strategic' sectors. Externally, exchange rate overvaluation allowed the autocrats to enjoy cheap imports while enacting trade policies that restricted competition. In particular, tariffs and export taxes were higher in Africa than in other regions of the world, partly because of a lack of other sources of tax revenue to finance the expansion of the public sector. By the 1990s, several African economies had accumulated unsustainable external debts, primarily to international organizations. This in turn depressed investment since lenders would be wary of future tax rises and higher interest rates.

Africa's problems have been numerous and though the consensus is forming that policy reform can address its slow rate of growth, there is some way to go before Africa might begin to catch up with the rest of the world.

Global application 17.2

Human Development Index

The United Nations Development Programme publishes a Human Development Report each year that compares countries' growth rates and per capita GDP. It goes further to also compare countries based on indicators of economic development, which may not perfectly correlate with GDP. The Human Development Index (HDI) tries to capture the level of development in a country to see if growth has been accompanied by an improvement in standards of living measured by life expectancy and some measure of human capital, such as adult literacy and educational enrolment. The HDI is an index that combines per capita GDP, life expectancy and human capital that is scaled between 0 and 100. So, a country that is close to 100 would rank very well indeed on human development. Table 1 gives a ranking of countries based on per capita GDP, adjusted for PPP in US$, and HDI. Interestingly, Norway is the highest ranking country in terms of HDI and only ranks below Luxembourg in terms of per capita GDP. The US and Ireland rank several notches higher on GDP than human development, while the reverse is true for the other countries ranked in the top ten in terms of HDI. At the low end of the ranking, Sierra Leone is both the poorest country in the world and has the lowest value in the HDI. (The bottom rank for GDP is 176 instead of 177 because Rwanda had no figures for per capita GDP for 2002.) The other countries at that end of the rankings look like a mixed bag in terms of where they stand in relation to GDP and with respect to human development.

Global application 17.2 (continued)

The HDI tells us a few things. The first is that a country's income level is not necessarily linked to its level of human development, so perhaps growth is too uni-dimensional as a policy focus. Second, rich countries like the US and Ireland appear to lag a bit behind other developed countries when it comes to human development even though they are richer than most. Finally, the least fortunate countries in the world when it comes to human development also look to be the poorest. So, there may not a perfect correlation, but there is undoubtedly one between economic growth and human development.

Table 1 Human Development Index, 2002

GDP rank	HDI rank	Country	Life expectancy at birth (years)	GDP per capita (PPP US$)	HDI Index (value out of 100)
2	1	Norway	78.9	36600	0.956
21	2	Sweden	80.0	26050	0.946
12	3	Australia	79.1	28260	0.946
9	4	Canada	79.3	29480	0.943
11	5	Netherlands	78.3	29100	0.942
13	6	Belgium	78.7	27570	0.942
8	7	Iceland	79.7	29750	0.941
4	8	US	77.0	35750	0.939
15	9	Japan	81.5	26940	0.938
3	10	Ireland	76.9	36360	0.936
172	168	Congo, Dem. Rep. of the	41.4	1020	0.379
154	169	Central African Republic	39.8	650	0.365
169	170	Ethiopia	45.5	1170	0.361
157	171	Mozambique	38.5	780	0.359
171	172	Guinea-Bissau	45.2	1050	0.354
173	173	Burundi	40.8	710	0.350
163	174	Mali	48.5	630	0.339
155	175	Burkina Faso	45.8	930	0.326
168	176	Niger	46.0	1100	0.302
176	177	Sierra Leone	34.3	800	0.292

Source: UNDP Human Development Report, 2004

Table 17.4 Chronically undernourished (million people)

Regions	1970	1989	1990	2000
North Africa	60	40	50	60
Latin America	60	50	70	40
East Asia	470	380	280	120
South Asia	250	300	260	200
Sub-Saharan Africa	90	150	220	260

Source: World Bank, *World Development Report*

Table 17.5 HIV and the requirement for food aid, 2002

Country	% Adults living with HIV	% Population in need of food aid
Angola	5.5	15
Lesotho	31.0	30
Malawi	15.0	29
Mozambique	13.0	3
Swaziland	33.4	24
Zambia	21.5	26
Zimbabwe	33.7	49

Source: United Nations

Health and nutrition

Another key issue for developing countries is health and nutrition. Table 17.4 clearly shows that the number of undernourished people has risen by nearly threefold in sub-Saharan Africa since 1970. It is generally on the decline in other regions of the world. Table 17.5 shows the incidence of HIV and the percentage of the adult population requiring food aid. Without a healthy population, growth is simply not feasible.

Debt and aid

Table 17.6 shows that, on average, debts are a significant part of GDP in most developing nations. However, it is the plight of some highly indebted poor countries (HIPC) that is at the forefront of the issue, the majority of which are in sub-Saharan Africa. Table 17.7 gives some evidence as to the magnitude of the debts of some HIPCs. The reason why debt is such an issue is because its service requires enormous resources in countries that are extremely poor. Table 17.8 sums up the problem well. Even after substantial debt relief in 2001, many poor countries were still spending more on debt servicing than on education and health. Without being able to divert more resources to these areas, it is unlikely that growth will ever take off. However, these nations also undoubtedly need to borrow in order

Table 17.6 LDC debt (% of GDP)

	1980	1999
All LDCs	26	41
Sub-Saharan Africa	29	69
E. Europe, Central Asia	24	51
Latin America, Caribbean	35	43
East Asia, Pacific	17	34
Middle East, N. Africa	31	34
South Asia	17	27

Source: World Bank, *World Development Report*

Table 17.7 Major debtors in sub-Saharan Africa, 1999

Country	Debt (% of GDP)
Angola	344
Zaire	307
Zambia	175
Mauritania	168
Sierra Leone	136
Ivory Coast	117

Source: World Bank, *World Development Report*

to make the investments that development requires. Therefore, debt should not be seen as an evil. If loans were used effectively, then profitable investments would generate the economic growth that makes the debt sustainable. Many of the problems which have arisen are because the high level of borrowing has not generated economic growth.

Still, the problems of HIPCs are significant and require addressing. Not only are the costs of servicing the debts very high, these economies are extremely fragile to shocks, such as interest rate changes and exchange rate movements. However, would the answer be for all debt to be forgiven? Many believe that the slate should be wiped clean, but this presents concerns. If HIPC governments know that debt will be forgiven, they have no incentive to use the funds wisely, especially as corruption is often rife in these nations. This is referred to as the problem of moral hazard. Second, these HIPCs must continue their quest for growth which will require the need for further resources in the future. If all debt is written off it will be seen by many as a form of default, which would lower that nation's credit rating and thus pose an impediment to the future financing of growth.

Table 17.8 Comparing debt servicing to spending on primary education and health, 2001

Highly indebted poor countries (HIPC)	Public expenditure on primary education $m	Public expenditure on health $m	Debt service $m
Benin	56	50	46
Bolivia	298	223	185
Burkina Faso	55	54	30
Cameroon	95	64	226
Gambia	1	1	16
Guinea-Bissau	3	2	6
Guyana	14	11	48
Honduras	94	89	134
Madagascar	33	45	64
Malawi	82	82	59
Mauritania	22	20	80
Nicaragua	25	32	117
Rwanda	6	8	16
Senegal	64	148	159
Uganda	37	16	51
Zambia	33	24	158

Source: Oxfam International, April 2001

Trade

International trade opens a country's borders and allows countries to specialize and exchange, generating gains from trade. By doing so, the overall economic pie gets bigger because each country can produce what it is relatively more efficient at and trade it for other goods. Production becomes more efficient, resources are used more efficiently and consumption possibilities increase, among others. Trade seems quite beneficial, but unfortunately as we will see later in the chapter, international trade is not quite free.

Investment

One of the main determinants of long-growth levels is investment. Governments usually need to borrow to invest in order to grow, and this will typically take the form of external borrowing for developing countries because there tends to be insufficient domestic savings. Over 90 per cent of the world's farmers live in developing countries and subsistence agriculture is not a substantial source of savings. This is not only because there may be a lower propensity to save, but because credit markets are often imperfect in developing countries. So, banks do not set up and people do not save their money in banks, which

Global application 17.3

Aid and growth: the Asian earthquake of 2004

The granting of aid by developed to developing countries totals around £60 billion each year, of which £5–6 billion is for humanitarian relief. The Asian earthquake and associated tsunamis of December 26, 2004 in the Indian Ocean galvanized the world. The devastation in human terms exceeded 200,000 dead and those who survived suffered from the possibility of disease due to lack of clean water and sanitation facilities. The worst earthquake in 40 years motivated pledges of aid and support from industrialized countries such as the US, UK and Japan.

The cost of rebuilding the affected economies is difficult to estimate, particularly since many of those who perished were uninsured farmers, but is in the vicinity of billions of dollars. Indonesia was closest to the epicentre of the earthquake, but it also affected Sri Lanka, Thailand, Malaysia, the Maldives, India, Bangladesh, Kenya, Burma, Tanzania, Somalia and the Seychelles. Most of the damage appears to have been experienced by farmers and the tourism industry, while ports, manufacturing and services were largely spared. This would ease economic rebuilding and recovery.

The Asian earthquake of 2004 can serve as an example of the importance of aid in helping a country develop and weather shocks, albeit the debate is not primarily over humanitarian aid. It is the use of aid money or lending in medium-term rebuilding that raises questions. Aid can take the form of either money or supplies such as food and clothing. Lending by international organizations such as the IMF or developed countries will require repayment with interest. Much of the controversy centres on how aid is used, as aid can be given with or without conditions. Conditions on aid can be viewed as outsiders telling a country how to run its affairs when the country itself should know its own conditions best, while the counter-argument suggests that no conditions can lead to squandering of aid money by governments. Finally, a country must stand on its own, so reliance on aid is not a long-term solution. However, aid, properly directed, can help a poor country get on its feet or help a country recover from a disaster. The growing divergence between the rich and poor in the world makes for a compelling case.

deprives a country of investment funds. Reliance on external borrowing has numerous downsides, some of which have been mentioned. One more element of it is fickle capital flows. Funds can quickly flow out of a country if conditions look risky. This does not provide conditions for long-term investment, which is required for growth. An alternative is to encourage remittances, which are the second largest source of capital in the world. This has worked well in China, while 'fees' have impeded its use in Latin America. **Foreign direct investment (FDI)** is another source of capital inflow and one that tends to be longer lasting. Unfortunately, what has happened is that many countries, in order to attract FDI, give away concessions that cause a 'race to the bottom', so that the domestic country seems not to reap very much from the investment. And FDI will tend to go where infrastructure exists to support the investment, which is not the case of most poor countries. Another attraction of FDI is the prospect of technology transfers, mentioned in Chapter 16 in the textbook. Investment can increase the steady-state level of growth, but copying existing technological advances can generate a rise in the rate of growth of an economy.

This is, however, seemingly easier said than done for most of the world's poor countries. An interesting example in this respect is India. It accounts for the bulk of the world's FDI in R&D among developing countries. India's skilled researchers have been successful in

Global application 17.4

The experience of India

A successful developing country that has the potential to become of the major economies in the world is India. India is the world's largest democracy and has grown at an impressive rate of over 6 per cent since the 1990s. India's economic progress has been uneven, though it is an economy that many believe has the potential to follow China and become the next trillion-dollar economy. However, India has one-quarter of the world's poor, more than 300 million, and lags behind China and other developing countries in both social as well as competitive indicators.

Since independence in 1947, India grew at what is considered to be an 'ordinary' rate of growth for developing countries in the post Second World War period until 1980. Since the late 1980s, India has become one of the fastest growing economies in the world, with a doubling in average GDP per capita in only 16 years. From 1950–1980, however, India grew at 3.7 per cent, which is sometimes called the 'Hindu rate of growth', suggesting that India has not pursued growth in an aggressive fashion. Though India eradicated famine by 1980, its rate of growth had been held back not only by closure to trade and investment but also an excessive regulatory state and pessimism generated by the inability of growth to reduce poverty. In contrast, from 1980 to 1990, India grew at 5.9 per cent, and the subsequent decade witnessed growth exceeding 6.2 per cent.

In the post-war period, India's first Prime Minister Nehru was thought to have led India by following a model that emulated the successful resource allocation of the former Soviet Union. In a desperately poor country like India, it could not afford to create a class of elite industrialists who benefited while the bulk of the population did not. Nevertheless, although the period became known as one of slower than potential growth, India did mobilize its resources well and built up a stock of savings. For example, India had a relatively high savings rate for a developing country in its development position. Total private savings as a share of national product were about 6 per cent of GDP in the early 1950s, but rapidly rose to an average of 23 per cent in the 1980s.

In the 1960s and 1970s, India also adopted an inward trade and investment policy. Its import-substitution strategy followed a period of strict controls on imports and exports. Although this did generate self-sufficiency and a diversified set of industries, costs were inordinately high, as were consumer goods. These restrictions became the impetus behind the liberalization agenda in the 1980s, which resulted in India's first growth spurt. Indian industrialists started pushing for a relaxation of tariffs and controls to reduce the import costs of raw materials and inputs. Strong export performance and remittances from overseas workers, particularly from the Middle East, had also generated a comfortable set of foreign exchange reserves, setting the policy-makers at ease who had feared another balance of payments crisis as in 1956–1957.

The 1980s reforms were undertaken by Rajiv Ghandi's government and included: encouraging capital imports and commodity exports, some industrial deregulation and a modest degree of tax system rationalization. India also eliminated quantitative controls on imports of industrial machinery and cut tariffs on imports of capital goods by 60 per cent. Taxes on profits from exports were also halved. Subsidies were reduced despite strong political opposition and in 1988 the government significantly reduced the number of industries subject to government capacity licensing. The government even began to end price controls on industrial goods, such as cement and aluminium. The result of this first wave of economic reform was an economic boom. Real GDP growth averaged 5.6 per cent per year, while exports grew at 15 per cent per annum. By the end of the 1980s, labour productivity increased and industrial growth hit a high of 9.2 per cent in 1988–1991.

The 1980s reforms, however, resulted in extensive borrowing abroad and rising government expenditure. During the 1980s, the investment-to-GDP ratio rose in the public sector, but fell

Global application 17.4 (continued)

in the private sector. External borrowing came about to bridge the gap between exports and imports; in other words, the higher level of imports was financed through external borrowing. Foreign debt rose from just over $20 billion in 1980 to about $65 billion ten years later. Domestic spending was geared toward stimulating aggregate demand, particularly in the services sector, in areas of defence spending, subsidies and higher wages. The result was an increasing fiscal deficit that reached 10 per cent in the second half of the 1980s. The culmination of these two sets of factors contributed to the 1991 debt crisis in India.

Rising oil prices during the first Gulf War and a disruption in overseas remittances from the Middle East exposed India's structural weakness. India exhausted its reserves by June 1991 and faced a crisis. The result was an impetus for reform.

Under the Rao government which won the 1991 elections, structural reforms were finally taken in the Indian economy. The 1990s reforms included two main aspects. Industrial licensing was all but removed and trade and exchange rate liberalization was undertaken. Import tariffs were reduced from an average of 85 per cent to 25 per cent and the rupee became convertible. By the mid-1990s, total trade as a proportion of GDP rose to more than 20 per cent. Foreign direct investment was encouraged and grew from effectively zero in the 1980s to $5 billion a year by the mid-1990s. The Rao government took the steps that the Rajiv Gandhi government had proposed to encourage foreign investment: it provided automatic government approval for FDI joint ventures in which foreigners held up to 51 per cent of the equity, for instance. The Rao government carried through to completion a number of initiatives begun during the Rajiv Gandhi government to replace quantitative restrictions on imports, lower tariffs, reduce the scope of licensing, and to begin to reduce the scope of publicly-owned monopolies. Attention was also focused on limiting money growth and controlling inflation. The government, though, was unsuccessful in erasing the extremely high budget deficits.

Economic performance, accordingly, picked up in the 1990s. Frequent government changes since the mid-1990s and associated electoral cycles, though, has slowed the pace of reform. There has been a backsliding in trade liberalization as well, where import tariffs rose by 4.5 per cent in 1998. Subsidies and the budget deficit are still at high levels. Public enterprise reform still remains slow and there are numerous labour market rigidities. Most recently, India has attempted to ensure that the remains of its old-fashioned industrial policy do not hinder the rapidly-expanding Indian information technology industry. The government has slowly taken steps towards establishing private industry and competition in electricity and telecommunications. The process by which licensing restrictions are removed from imports has continued. And, further steps have been taken to try to rationalize the tax system. The net effect of all of these reform policies has been a decade and a half of growth at the 'new Hindu rate of growth' of 6 per cent per year of GDP and of nearly 4 per cent per year for labour productivity. This impressive pace of growth has made India one of the world's fastest-growing large economies – behind only China. However, India remains a country with high poverty and illiteracy, a significant gender gap and deep social divisions, notably the caste system. Whether India will continue to grow despite an uneven history and a poor set of initial conditions will depend a great deal on its public sector initiatives and the continuation of market-oriented reforms. With a considerable domestic economy, continued liberalization, focus on education and skills in the high tech sector, and recent overtures to establish export manufacturing capacity, India is well poised to grow provided that the pace of reforms remains robust.

developing an information and communication technology sector. However, it appears not to have been able to translate this success into industrial production, which reminds us that R&D should not be for its own sake but needs to be geared towards improving productivity in output. Without a domestic R&D sector, the need for technological advancements to sustain a persistent rate of growth means that technology transfers are crucial. The issue of intellectual property rights is thus important when considering a development strategy as is the international system that affects technology diffusion.

The economics of development is one of the most complex subjects in economics, and we have really only begun to scratch the surface. Trade, opening, developing human capital, investing in infrastructure, promoting health, improving institutions, and the accountability of states, are all crucial to economic development.

17.3 Import-substitution versus export-orientation: Latin America and East Asia

A major debate in development in the past 40 years has been between whether to take an import-substitution strategy or adopt an export-led approach to growth. The former characterized Latin America and also India until the 1970s, while the latter is associated with the East Asian 'tiger' economies of Taiwan, Hong Kong, Singapore and South Korea from the mid-1960s onward. **Import-substitution industrialization** (ISI) was attractive for countries such as Brazil and has been a successful paradigm for development for some time. The goal of import-substitution is protectionist. Developing countries protected themselves against foreign competition by restricting imports and expanding domestic industries. The concept of **net barter terms of trade** allows us to see why this was important for predominantly agricultural economies. If the net barter terms of trade, which is the ratio of an index of export prices to an index of import prices, is likely to decline for developing countries in their trade with developed countries, then developing countries will opt for protectionism and attempt to develop a diversified industrial base. If agricultural goods prices are volatile and will decline, then the higher value-added, manufactured goods must be a priority, so a country seeking long-term growth must industrialize. ISI allowed countries to develop a broad industrial base since domestic firms provided for the needs of the populace, while the policy allowed these same firms to grow and gain economies of scale so that they could eventually compete in world markets against large multinational corporations usually from developed countries. This strategy was attractive in that countries could also diversify their exports while shielding their own firms from competition. For instance, Brazil reduced coffee as its main export to diversify into manufactured goods, which was beneficial to its external balance since commodities experience a great deal of volatility in world markets while manufactures represent the bulk of stable world trade.

Brazil

Focusing on Latin America's largest economy, after the Second World War, Brazil's growth strategy aimed to diversify its exports into manufactures and fuel import-substitution industrialization, which was facilitated by its large domestic market. For 35 years the economy expanded rapidly, and a large and diversified industrial sector was developed. Brazil succeeded in reducing its reliance on coffee, which on its own had accounted for 60 per cent of exports, to a mere 2 per cent. By 1995, agricultural products and other raw materials accounted for 25 per cent of exports. Manufactured goods, such as motor

Global application 17.5

How volatile are primary commodity prices?

Many developing nations rely heavily on the exports of primary products for national income. Table 2 reports the export concentration of the main export good for several nations. It is clear that many developing nations are may be over-reliant on the sales of just one commodity.

Table 3 presents some simple evidence on the real price of primary products. It is apparent that there are two problems. First, prices are fairly volatile and second apart from petroleum, prices have fallen quite substantially. This leaves developing nations with a volatile and falling source of income.

As a counterpart to this example, the high growth economies in the last 40 years have been the Asian 'tigers'. Table 4 shows that this high growth period has been associated with a very substantial rise in manufactures as a proportion of exports. Many argue that the growth of these economies has thus been export-led and derives from the production of industrialized products rather than agricultural goods.

Table 2 Export concentration of the main export good

Country	Commodity	% of total exports
Guinea-Bissau	Ground Nuts	94
Uganda	Coffee	56
Zambia	Copper	56
Mauritania	Iron Ore	52
Mali	Cotton	46

Source: *Financial Times*, 30 January 2002

Table 3 Real price of primary products (1995 = 100)

Commodity	1955	1975	1995	2000
Petroleum	57	180	100	195
Gold	43	120	100	58
8 other minerals	152	200	100	69
28 soft products	186	217	100	68

Source: IMF International Financial Statistics

Global application 17.5 (continued)

Table 4 Trade in Asia: % of manufactures in total exports

Country	1965	2000
Indonesia	2	54
Hong Kong	95	90
Malaysia	6	80
Singapore	34	86
S. Korea	59	91
Thailand	4	74
China	47	88

Source: World Bank, World Development Report

vehicles, machinery and chemical products, accounted for 64 per cent. The remaining 11 per cent came from services, including Brazilian engineering companies working abroad and exports of television programmes.

In the 1970s, however, Brazil as a net importer suffered from the global oil shocks. It precipitated the decline in the Brazilian economy from its previous rapid rate of growth of nearly 6 per cent per annum to an average growth rate of 0.3 per cent during the 1980s. It became apparent that the gains from import-substitution were exhausted. This can happen due to a number of reasons that will differ from economy to economy. However, import-substitution industrialization introduces protectionism that makes imports expensive. As domestic firms grow and expand into global markets, imports of intermediate goods become more important but these are hampered by import tariffs and restrictions. Moreover, an inward orientation can cause a country to fall behind the technological innovations and advances in the global economy, hampering the ability of developing countries to 'catch up' with developed ones. The limitations of import-substitution, coupled with the oil price shocks of the 1970s that exposed these frailties, marked a shift in opinion away from import-substitution and towards export-orientation as a growth strategy.

East Asia

The East Asian 'miracle' refers to the rapid and at times double-digit growth of Hong Kong, Singapore, Taiwan and South Korea from the mid-1960s to the 1990s. Table 17.3 shows that the East Asian region grew at nearly 6 per cent per annum in the past 30 years, easily outpacing the growth of the rest of the developing world. The strategy undertaken by the East Asian 'tiger' economies centred on industrial policy geared at promoting exports and export-oriented industries. This **export-led growth strategy** is viewed with some controversy. It has been considered as consistent with trade liberalization and opening, which follow market-oriented principles of growth. At other times, it has been viewed as protectionist and restrictive of trade in such a way as to benefit domestic firms to allow them to gain global market share. There is a further critique that by attracting foreign investment in manufacturing and exporting those goods, these countries are not gaining productive

efficiencies, rendering their growth to be driven by factor accumulation and spurred by investment alone. The degree of state intervention and use of industrial policy differed from country to country, but a focus on attracting foreign investment to produce manufactures for exports is a formula that has generated strong growth under this approach.

What is remarkable about the East Asian growth experience is that these countries were able to choose their industrial policies so well. Imagine how difficult that would be for any country. By promoting the production of electronics, the 'tiger' economy benefited from the revolutionary impact of personal computing and electronic products in the past few decades. Today, more than half of the world's PCs and over 80 per cent of semiconductor chips are assembled in Asia.

Table 17.9 gives annual per capita growth rates from 1965–2000. East Asian success is particularly impressive given the relatively small sizes of these economies. Compared with the US or even the UK, the largest of these economies are only half of the size of the UK in population. We also see from Table 17.9 that there are remarkably high rates of saving in these economies. Remember that savings equals investment, so this is a persuasive reason for success. Indeed, investment rates are correspondingly high. Finally, we see from this table that openness, measured as exports plus imports as a proportion of GDP, is a significant factor in these economies.

It would also be useful to consider the new 'tiger' economies in Asia, namely, Malaysia, Indonesia, Thailand and the Philippines. Though much differs for these economies, including population, the rise of the new 'tigers' through a similar export-led strategy has been similarly successful. Table 17.10 first gives the average per capita GDP growth rates of the eight 'tiger' economies from 1971 to 1995 before the Asian financial crises derailed many of these countries' growth. From the table, it is clear that these are high growth rates and successful economies, with the possible exception of the Philippines in recent years.

In terms of extraordinary gains in global market share, Figure 17.1 gives a picture of the share of global market in manufactured goods by the new and old tigers as well as China. The Asian 'tiger' economies control about a quarter of the global market in traded manufactures, which in turn accounted for 83 per cent of world markets in 2000. We will discuss China in the following section in more detail, since it is an interesting example of successful growth with its mix of transition and development characteristics. On the whole, the market share held by the Asian newly industrializing countries (NICs) is impressive and provides support for the importance of trade in growth prospects.

Table 17.9 East Asian 'tiger' economies, 1965–2000

Country		1965	1970	1980	1990	2000
Hong Kong	Population	3 692000	3 942000	5 039000	5 704500	6 797000
	GDP growth rate[a] (%)	14.02	9.19	9.11	3.75	8.12
	Savings rate[b] (%)	37.45	30.69	30.92	31.62	29.73
	Investment rate[c] (%)	34.86	20.68	29.02	22.82	25.27
	Openness[d] (%)	186.79	143.72	163.75	181.39	295.19
Singapore	Population	1 887000	2 075000	2 414000	3 047000	3 526000
	GDP growth rate (%)	-25.12	12.32	9.93	6.07	6.55
	Savings rate (%)	31.31	37.33	49.22	50.38	56.57
	Investment rate (%)	36.34	50.07	48.65	40.76	42.94
	Openness (%)	269.04	231.59	439.03	401.17	340.63
South Korea	Population	28 814200	32 241000	38 124000	42 869000	47 275000
	GDP growth rate (%)	2.67	5.90	-4.88	8.30	7.20
	Savings rate %	7.33	13.86	25.82	37.91	33.56
	Investment rate %	12.12	20.27	29.14	38.43	28.02
	Openness %	24.37	37.72	73.32	59.35	87.18
Taiwan	Population	12 928000	14 565000	17 642000	20 230000	21 214990
	GDP growth rate (%)	8.56	9.11	5.05	4.00	5.34
	Savings rate %	11.03	17.73	23.72	23.59	23.34
	Investment rate %	11.75	16.05	21.9	18.24	21.19
	Openness %	41.66	60.57	106.24	88.52	94.32

Notes: [a] GDP growth rate is calculated as growth rate of real GDP per capita.
[b] Savings as a percentage of GDP.
[c] Investment as a percentage of GDP.
[d] Openness is measured as exports plus imports as a percentage of GDP at constant prices.
[e] Figures pertain to 1995.

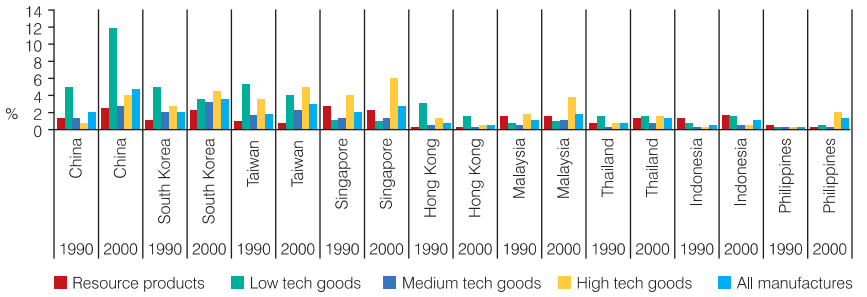
Source: World Penn Tables

Table 17.10 Average real per capita GDP percentage growth rates of the 'tiger' economies, 1965–2000

Country	1971–1980	1981–1990	1991–1995
Hong Kong	9.3	7.2	5.6
South Korea	9.0	8.8	7.2
Singapore	7.9	6.3	8.7
Taiwan	9.3	8.5	6.5
Indonesia	7.7	5.5	7.6
Malaysia	7.8	5.2	8.7
The Philippines	6.0	1.0	2.3
Thailand	7.9	7.9	8.4

Source: World Bank, World Development Indicators

Figure 17.1 Market share of world trade of Asian economies Source: World Trade Organization



Moreover, these economies have not just been successful; they are also examples of growth without rising inequality. Income inequality has fallen, as measured by the **Gini coefficient**, seen in Table 17.11. The Gini coefficient is a measure of the absolute difference in incomes for every household in the country. If it is 1.00, then it is a very unequal country. If it is zero, then the country is completely equal and everyone has the same level of income. By this measure, growth in Asia, including the progress of the new 'tiger' economies, has been accompanied by decreasing income inequality.

The evidence thus far suggests that export-led growth appears to be more successful than import-substitution. This is not without its own problems in terms of sustainability of export-oriented growth. However, opening to the global economy and external orientation are increasingly the norm in today's globalized world. A key feature of the Asian experience, though, is not to rely on exports alone, but to induce investment, foreign and domestic, which is a determinant of increasing the steady-state level of growth for an economy.

Table 17.11 Gini coefficient for Asian countries, 1965–1990

Countries	1965–1970	1971–1980	1981–1990
South Korea	0.34	0.38	0.33
Taiwan	0.32	0.36	0.30
Singapore	0.50	0.45	0.41
Hong Kong	0.49	0.42	0.39
Indonesia	0.40	0.41	0.30
Thailand	0.44	0.38	0.46
Malaysia	0.50	0.48	0.42
Region	**0.41**	**0.39**	**0.36**

Source: The World Bank, Economic and Social Database

17.4 Transition and marketization: China and the former Soviet Union

Centrally-planned economies competed with capitalist ones for nearly 50 years until the collapse of Communism in Russia and Eastern Europe in the late 1980s and early 1990s. China also embraced marketization and rejected central planning in the late twentieth century. The burden of central planning and the inefficiencies of administratively determined economic decisions had taken their toll.

There are two manners of growth in such economies, namely, extensive versus intensive growth. **Extensive growth** is growth through expanding inputs, while **intensive growth** represents growth through technological advancement. Extensive growth is thought to lead to rapid growth at the start followed by a dramatic slowdown. This characterizes the experience of the former Soviet Union, which grew well in the 1950s but headed for a rapid decline in the 1970s. Intensive growth, on the other hand, would suggest long-run growth.

The transition of the previously centrally planned economies of the former Soviet Union and Eastern Europe as well as China are all invariably different. A paradigm that captures a key element of the policy debate is between a **gradualist transition path** and one that advocates rapid liberalization, the so-called '**shock therapy**' or '**big bang**' approach. Taking the two major transition economies as examples, China undertook market-oriented economic reforms at a gradual or incremental pace while the former Soviet Union went with 'big bang'. The arguments for a rapid liberalization approach centre on maximizing economic efficiency. In the former Soviet Union, prices were liberalized practically overnight and people were exhorted to 'trade anytime, anywhere'. If market forces are quickly introduced, then the 'invisible hand' rather than the government could dictate where resources should be allocated and how prices should be determined in an efficient manner. On the other hand, gradualism is controlled liberalization, where a portion of the market is liberalized, usually the easier parts first, to make sure that reforms do not result in instability or collapse, or meet with fierce resistance. This is the path that China undertook since market-oriented reforms were introduced in 1978.

Global application 17.6

Who lost Russia?

For a time after Russia underwent a serious financial and currency crisis in 1998, one of the most often heard questions was 'Who lost Russia?' Later, this became 'No one lost Russia.' This scrutiny highlights the dismay felt by many as the former Soviet Union in the post-communist period lost a decade of growth when national income nearly halved in a country that is resource-rich, holding 13 per cent of the world's oil reserves and over a third of its natural gas reserves. Not only is Russia rich in resources, it also embraced capitalism and marketization to the extent that it undertook privatization of its previously state-owned industries en masse and adopted significant liberalization measures.

Russia's economy is smaller now than before the collapse of the Soviet Union, even though it is growing at a rate of over 6 per cent per annum. Its long-term prospects, though, surpass those of many developing countries, as it did start with a higher level of development as a transition economy. Because of a shrinking population base, Russia is also projected to have the highest GDP per capita of the major emerging economies within the next few decades, again consistent with its starting level of development despite the stagnation of the 1990s. However, Russia remains plagued by corruption, a concentration of resources held by wealthy oligarchs, and is still subject to macroeconomic instability, including inflationary pressures. Russia was, and is, one of the most important economic transitions of our time, but it faces one of the toughest reform agendas to sustain growth.

Simply put, Russia presented one of the most significant opportunities for transition. The government had set out to transform its economy from a centrally planned one to a market economy in a manner that is termed 'shock therapy'. For instance, most prices were freed from government control overnight in 1992. This resulted in inflation that wiped out savings and caused severe macroeconomic instability. By contrast, the hyper-inflation that plagued Russia at rates of double-digit inflation per month, was not experienced in China, which had dismantled its price system over the course of more than a decade. This first round of price liberalization in Russia necessitated a second round of reforms of tight monetary policy that included raising interest rates to control inflation. However, not all prices had been free, as important prices, such as those for natural resources, were kept low. This meant that oil, for instance, could be bought cheaply in Russia and resold for high profits abroad and contributed to creating a class of oligarchs.

Russia's quick adoption of liberalization and stabilization also caused numerous difficulties with the third pillar of a radical reform plan. Inflation had decreased savings while austere monetary policy raised interest rates, making capital more expensive to obtain for households to participate. It also reduced the real value of debts of well-placed Russians, placing them in an advantageous position when privatization occurred. There was also a lack of financial institutions with which to provide capital, which also affected the restructuring of the newly privatised enterprises. Finance is also needed to fuel new investment in industry. The unsuccessful privatization initiative further generated substantial unemployment in Russia. Between 1990 and 1999, Russia's industrial production fell by almost 60 per cent, which is greater even than the fall in GDP.

A brief transition period in Russia turned into a decade of decline and stagnation. There were glimpses of recovery in 1997, which were quickly dispelled by the 1998 financial crisis. At that time, Russia's government was poor despite its abundance of natural resources and unable to provide pensions or welfare payments. The government was becomingly increasingly indebted externally, particularly to the IMF, and experiencing large outflows of capital after undertaking financial liberalization that opened its capital markets to the global economy. When confidence ebbed in

Global application 17.6 (continued)

Russia, capital flight resulted. Therefore, when oil prices fell due to recessions in South East Asia and oil demand contracted, Russia's government, which depended on oil as a major export, experienced serious crisis. A devaluation of the exchange rate could have helped the oil industry experiencing declining demand. However, it was feared that devaluation could set off hyper-inflation. And, high interest rates resulting from the East Asian crisis made Russia's debt much more difficult to repay. As reserves dwindled from defending the overvalued rouble, currency speculators expected the rouble to crash and for it to be bailed out by the IMF, which happened as expected.

The rescue led by the IMF, though, failed. Three weeks after the IMF loan was made, Russia suspended payments and devalued the rouble, which promptly crashed. The repercussions were felt in global markets, including increasing interest rates for borrowing by other emerging markets and contributing to the collapse and subsequent bail out of one of the US's largest hedge funds, which could have resulted in more global financial instability.

Subsequent to the crisis, the devaluation improved the position of Russia's import-competing sectors, so that goods produced domestically increased their market share and began to fuel Russia's recovery. Between 1999 and 2000, Russia grew by 1 per cent and growth has increased quickly reaching 6–7 per cent. Industry in Russia continues to struggle and has declined from nearly half to one-third of GDP, while services are growing. Agriculture continues to decline, contributing only 5 per cent of GDP, while accounting for a significant amount of surplus labour as this sector accounts for over 10 per cent of employment. Finally, Russia became more unequal and experienced greater poverty during this period. In 1989, only 2 per cent of Russians lived in poverty. By late 1998, that figure had risen to 23.8 per cent and more than 50 per cent of children lived in poverty.

Manufacturing still remains strongly biased towards heavy industry, where fuel and energy accounts for over 20 per cent of industrial output. Light manufacturing, including goods with higher technological components, accounts for a mere 2 per cent. Accordingly, Russia's industries are predominantly large enterprises, as opposed to small and medium-sized enterprises, which typically are the sources of growth. Bureaucratic burdens and the market power of the large enterprises have stifled the development of this usually dynamic sector, but Russia has undertaken reforms to begin to facilitate their growth. Russia's reform agenda will and should continue to centre on controlling inflation, given its history of macroeconomic instability generated internally and externally, as well as undertake the institutional reforms that were lacking during its transition. The presence of oligarchs and growing income inequality are likely to make this a difficult task. Russia also confronts numerous significant challenges in its social agenda, including low life expectancy and the need to improve education and health. Finally, Russia's push to join the WTO might provide an impetus to undertake legal reforms and improve the development of its industrial sector.

Russia, because of the richness of its natural resource endowment and low population growth, has the potential to become one of the world's major economies. The institutional failings which plagued the first decade of its post-communist period continue to raise questions about its future growth and ability to fulfil its potential.

The former Soviet Union

The experience of the former Soviet Union 25 years since reforms is not heartening. GDP is half of what it was before 1989 and incomes are unequally distributed. China, on the other hand, has experienced real GDP growth of over 9 per cent per annum during the same period and has halved the number of people living in poverty. However, there are costs to a gradualist approach, particularly since the hardest issues of reforms, such as the close relationship between state enterprises and state banks, remain. Also, the sequence of reforms has to be dictated somehow, and that can be a challenging task for any government. Finally, does 'shock therapy' mean that no reform sequence was in place? It does not. For instance, in Russia, prices were liberalized first so that they could play the allocative and distribute roles of dictating scarcity and use in a market economy. Tight monetary policy followed to counteract the inflation that ensued and then the privatization of former state assets could take place, once the macroeconomic picture was stable. Even though this did not work well in the former Soviet Union, there was still a sequence of reforms. It therefore raises the question: Is transition really a question of the speed or the sequencing of reforms?

China

The country that is worth spending some time on as both an example of successful transition and as a developing country is China. Since economic reforms began in 1978, China has become a powerhouse economy, growing at an impressive rate for over two decades and fast becoming one of the largest economies in the world. China seems to have achieved growth through a 'dual track' approach whereby a market sector is created alongside the state sector. This allowed China to gradually introduce market-oriented incentives first in rural areas in the late 1970s and then in urban areas in the mid-1980s. This approach even extended to the jump start of the 'open door policy' in 1992 when China began to open its borders to foreign direct investment into specially designated export zones. At the same time, China began to produce manufactured goods for export, ultimately becoming the world's leading producer of toys, textiles, clothing and, increasingly, electronic goods. Within the span of a decade since opening, China has become the world's sixth largest economy, the third largest exporter and importer in the world, and is predicted to become one of the world's largest economies. However, there are a number of structural problems which remain in China's transition that are particular to a gradualist transition path.

The core structural problems in the Chinese economy stem from the close relationship among three main state sector players from the command period that continues through the reform period. These are state-owned enterprises, the government and state-owned commercial banks. These problems are also a result of China's gradualist transition path. By gradually introducing market forces into the economy, the most difficult problems in the reform path remain unresolved. China's remaining difficulties are further highlighted by its accession to the World Trade Organization (WTO), which requires significant liberalization in trade and financial services. Although there have been many benefits from WTO membership, accession has also contributed to the reduction in competitiveness of state-owned enterprises and exposed the lack of market forces governing lending by state-owned commercial banks. The decline of state-owned enterprises has further drained the government of its traditional source of revenues and instead increased the amount of subsidies, including loans from state-owned banks. The transfers from state-owned banks to loss-making state-owned enterprises and the lack of credit assessments in lending have generated significant amounts of non-performing loans. The culmination of policy loans, 'soft' budget constraints for state-owned enterprises and the decentralization of local state-owned commercial banks have resulted in a significant stock of non-performing loans estimated at 2 trillion RMB in 2004. As a proportion of GDP, non-performing loans are in the region of 20 per cent of total national income. Other estimates put the figure

higher. The root of the non-performing loans problem, however, cannot be solved without addressing the inefficiency of state-owned enterprises, whose lack of competitiveness has generated accordingly substantial urban unemployment for the first time in the reform period. This set of problems constitutes one of the most significant challenges confronting China's transition.

Moreover, China had pursued economic development with limited external orientation. Attracting FDI, though, has been a part of its growth strategy for the past couple of decades and increasingly contributes to growth. However, severe controls on the external sector have limited China's exposure to macroeconomic shocks. For instance, China weathered the Asian financial crises relatively well but was not immune to the associated deflationary stance. In addition accession to the WTO brings with it significant pressures for increased liberalization and compliance with international economic law. China's incomplete legal system will require extensive reforms to meet the demands of the international economic regime. China's reaction to the pressures of liberalization will also determine the viability of its growth.

Finally, the success of China in achieving its ambitious reform agenda will also depend critically on its progress in balancing growth and staving off unrest, reducing the institutional barriers to labour mobility, meeting the social insecurities of its populace, and addressing resource and health issues within the entirety of its economy. The growing inequality in income and wages between the urban and rural sectors, between the coastal and interior provinces, and between urban residents and migrant workers, is a potentially destabilizing factor. And, stability is the final element in any assessment of a gradualist transition path, which requires the government to be able to exert sufficient control over a partially marketized economy.

China's growth is an impressive achievement for a country whose GDP per capita only exceeded $1000 in 2004, the level of a least developed country. It is also extraordinary since all of this growth happened without clearly defined property rights, a secure contracting regime or even private property, which has only been recognized in the Constitution since March 2004. However, China is a rather unique case and too much should not be drawn from its experience. And, it may be too soon to say whether China's growth at the remarkable rate of over 9 per cent will be sustainable.

17.5 Economic growth in an international framework

One of the most significant developments in the international economic order in the post-war period is the advent of an international system which includes the Bretton Woods institutions of the World Bank and IMF, and also the establishment of rules for countries to engage and trade with each other. In 1994, the Uruguay Round established the World Trade Organization and the articles of establishment created international rules for trade. The WTO succeeded GATT (the General Agreement on Tariffs and Trade) and created a multilateral trading regime. The 195 member nations of the WTO in 2005 account for 99 per cent of world trade and each are bound by the provisions of international economic law. Prior to this, the world trade regime had often been run by the 'law of the jungle'. Sovereignty meant that countries could not force other countries to abide by trade contracts or agreements. This led to retaliation and protectionism among countries. A multilateral trade regime, including its own dispute settlement mechanism, means that there is more security and certainty in world trade. As world economic growth has averaged 3.8 per cent in the post-war period, growth in world trade has exceeded 9 per cent per annum. It seems clear that the overall economic growth is accompanied by a growth in traded goods and services, primarily manufactured goods but also agricultural products and natural resources.

This relationship between growth and trade can be seen by the straightforward macroeconomic identity discussed in the textbook, namely, GDP and exports. It seems then that if countries want to grow, they should open their economies to trade. This is much more complicated, however, than the simple macroeconomic principles would suggest. First and foremost, trade takes place within imperfectly competitive markets. This means that new firms in developing countries cannot compete easily with large multinational corporations who have market power in world markets. Also, many developing countries are in the early stages of industrialization, so their **comparative advantage** would be in primary products, such as commodities. Commodities account for about 7 per cent of world markets and tend to experience highly fluctuating prices, making them a risky source of revenue for growth. Many of the developing countries that have succeeded in using trade as a part of their growth strategy, such as Brazil and Sri Lanka, have reduced their reliance on exports of primary products. For Sri Lanka, where plantation crops previously accounted for over 90 per cent of exports, they now only account for about 10 per cent. Others, such as countries in sub-Saharan Africa, have found that opening to world trade has not resulted in growth.

What will be the effect on development with the advent of international economic law? The rules of trade will be better established, so that if more economically powerful economies, like the US or the European Union, violate WTO rules by subsidizing cotton or sugar, then a developing country like Brazil can bring action against them before the WTO. This system levels the playing field for the less developed nations. World trade does not always run so smoothly, though, and the regime itself still has many unresolved issues.

In the Doha Round launched in 1999, the WTO sought to dismantle further trade barriers in this 'development' round, which is geared towards reforms that will aid the growth prospects of poor countries who seemingly have not benefited as much from trade and financial liberalization as envisioned. The agenda includes matters such as removing agricultural subsidies and opening markets. The worry is whether the slow progress in dismantling such trade barriers could threaten the multilateral structure of the WTO. However, the alternative of returning to the 'law of the jungle' is simply not palatable.

The extent of trade barriers underscores how far the world's multilateral regime is from the ideal of free trade. However, having rules of trade, a form of adjudication of trade disputes and avenues of negotiation improves the previous system to a significant extent.

As for economic growth, the advent of the WTO and a rules-based system for trade establish an institutional framework that can benefit growing economies. Rules, regulations, coordination and dispute settlement are all aspects of this new international economic order that can provide an arbiter to aid the development of a country which seeks growth via opening and trade. The work of the World Bank in poverty alleviation is another source of aid and technical assistance for developing countries. The IMF also plays a role in serving as a source of funds to help countries experiencing short-term liquidity. Together with the UN group of organizations, such as UNIDO and UNDP, these organizations form a supra-national structure for the global economy. As such, the future growth approach of countries will necessarily need to consider the strictures of international economic law and global institutions.

Global application 17.7

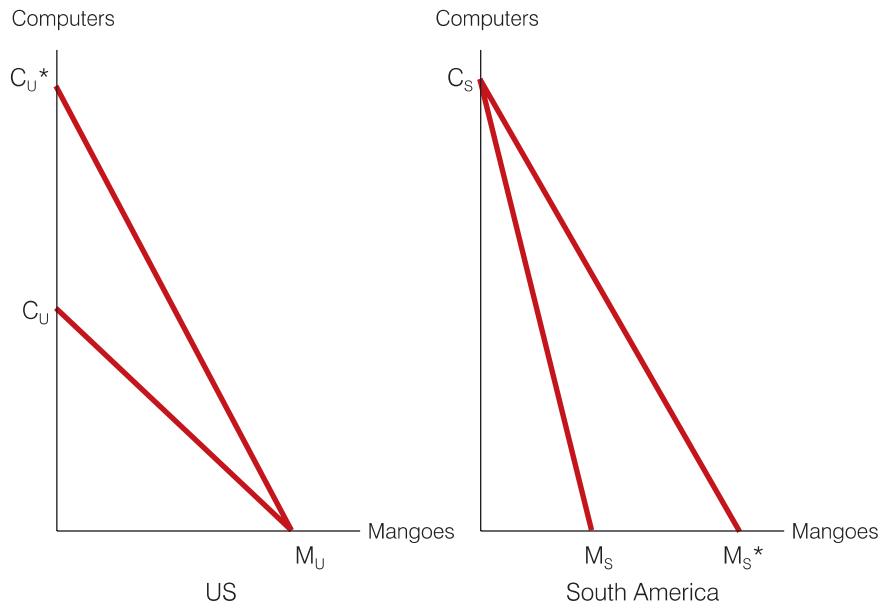
Comparative advantage and why countries trade

The Nobel Laureate Paul Samuelson once described **comparative advantage** as the best example of an economic principle that is undeniably true and yet not obvious to intelligent people. So, what is comparative advantage and why is it important? The comparative advantage of a nation refers to the notion that countries can gain from trade if they specialize and exchange goods in which each is relatively more efficient. Therefore, even if a nation, such as China, is the lowest cost producer of manufactured goods and has an absolute advantage in production, it will still be welfare-enhancing for China to trade with other nations to obtain the goods in which it is relatively less efficient in producing.

Misunderstanding this concept has generated much ire from prominent trade economists such as Paul Krugman. A simple illustration based on the opportunity cost of producing a good to explain comparative advantage follows. The US can produce 10,000 mangoes or 100,000 computers, while Africa can produce 10,000 mangoes or 20,000 computers. This is because Africa is more efficient at growing crops and less efficient at producing computers. If they trade so that the US imports mangoes and specializes in the production of computers and vice versa for Africa, then the world would still have 10,000 mangoes but benefit from having 80,000 more computers because they engaged in trade. Producing more computers and the same number of mangoes means the global economy has grown and standards of living will improve.

This is also illustrated in Figure 3. In autarky, when countries do not trade and have closed economies, they can only consume what they produce. So, the US can only consume what it can produce within its **production possibility**

Figure 2 Comparative advantage



Global application 17.6 (continued)

frontier (PPF), which gives the maximum of what can be produced by an economy with its factors of production. Correspondingly, consumers can only consume within the PPF. So, without trade, consumers in the US can only consume anywhere within the line M_UC_U and Asia can only consume within M_SC_S. But, with trade, consumers can consume outside of a country's production possibility frontier. Consumers in the US can now consume anywhere within the line M_UC_U* and Africa can consume anywhere within the line M_S*C_S. In the absence of trade, consumption possibilities are given by a country's production possibility frontier. With trade, consumption increases and there are now more mangoes and computers produced in the world with the same amount of inputs. Therefore, standards of living should improve as does economic efficiency in the global economy.

The simplest way to consider this economic principle is to keep in mind that nations will not trade unless there are gains from trade. In other words, nations will not engage in trade if there are not benefits to be had from specialization and then exchange.

Summary

- In this chapter, we examined the approaches to growth undertaken by successful and less successful developing and transition economies since the 1950s. Their experiences have been diverse.
- We identified some of the main elements of economic development that have contributed to divergent growth rates around the world.
- We analysed the difference between import-substitution and export-led growth, using the examples of Latin America and East Asia.
- We covered the experience of transition economies, focusing on China and the former Soviet Union.
- We concluded the chapter with an assessment of the international economic system, including the WTO and the advent of international economic law, and the framework for growth.

Key terms

'Big bang' or 'shock therapy'
Comparative advantage
Export-led growth
Extensive growth
Foreign direct investment
Import-substitution industrialization
Intensive growth
Globalization
Gradualist transition path
Growth accounting
International trade
Net barter terms of trade
Poverty
Production possibility frontier (PPF)
Total factor productivity

Review questions

1. 'Vicious and virtuous circles are at the heart of the problem of development.' Can this view explain the different economic performance of sub-Saharan Africa and East Asia?
2. What does the empirical evidence on cross-country growth performance tell us about the design of pro-growth policies for poor countries?
3. Does trade liberalization by developing countries help or hinder their industrialization?
4. Do standard models of investment for developed economies adequately explain private investment in less developed economies?
5. 'The need for technology provides the main justification for the government of a poor country to encourage multinational investment, so any downside has to be accepted.' Discuss.

More advanced problems

6. Demand for a product in a small open economy is given by $Q_D = 200 - 2p$, where p is the price of the product (given in £s). Domestic supply is given by $Q_S = 2p$. Initially, there are no restrictions on imports of this product and the country faces a perfectly elastic foreign supply curve. The world market price is £20 per unit.
   a. How much of the total demand of 160 units is supplied by domestic producers and how many units are imported?
      Then, a unit tariff is imposed, which raises the domestic price by 100 per cent.
   b. What is the percentage fall in imports, and the tariff revenue generated?