B. The increasing importance of developing countries in the global economy
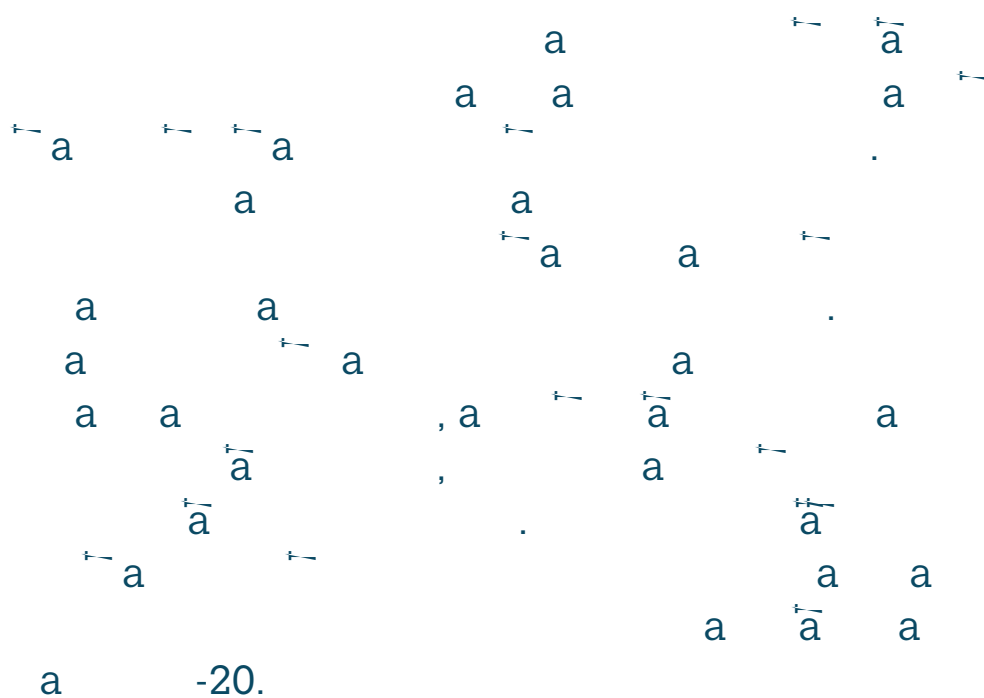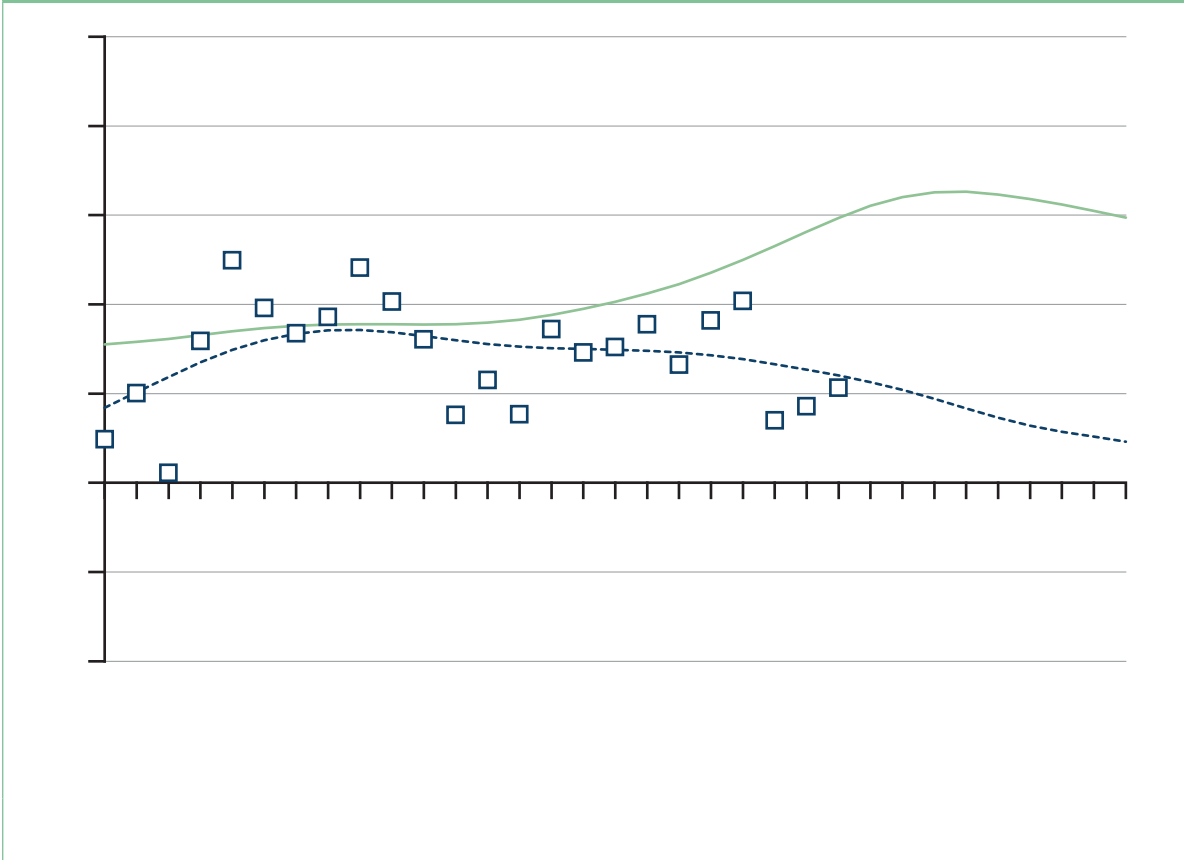
B. THE INCREASING IMPORTANCE OF
DEVELOPING COUNTRIES IN THE
GLOBAL ECONOMY

However, despite significant progress made by developing economies overall, many countries remain desperately poor, and even the most dynamic developing economies still have large numbers of people living below the poverty line. Whether the economic success of recent years can be sustained in the future is also a matter of some uncertainty, since developing economies have never

Figure B.1 GDP growth at constant prices by level of development, 1980…2012 (annual percentage change)

very little, providing evidence of convergence between developed and developing countries. Interestingly, a number of middle-income countries have begun to converge with high-income economies at an even faster pace. As a result of this change, the distribution of world incomes showed a three-peaked (i.e. tri-modal) shape in 2011.

As there are now fewer countries with incomes below US$ 8,000 and more with incomes above US$ 9,000, this suggests that income inequality between countries probably went down between 2000 and 2011. However, this measure fails to account for income variation within countries. This additional source of variation must also be taken into account when attempting to measure inequality for the world as a whole.

Sala-i-Martin (2006) and Pinkovskiy and Sala-i-Martin (2009) have produced estimates of global income distribution from 1970 to 2006 which reflect both inequality within countries and between countries. This research finds that most of the inequality at the global leveldinPcountries

decline of just 0.1 per cent per year. Meanwhile, per capita income growth in the second, third, and fourth quartiles was around 2 age points higher in the second period than in the first.

Faster income growth was associated with higher levels of investment, schooling, trade and FDI in both the 1990s and 2000s, although the top quartile in the later period had lower levels of both primary and secondary school enrolment than the third quartile. Measures of institutional quality (i.e. regulatory quality and rule of law) increased with per capita GDP in the 1990s but decreased during the 2000s, to the point that the top quartile actually recorded the lowest scores for both regulatory quality and rule of law.

(b) Trade and growth

The case for free trade typically rests on the existence of gains from trade. Most economists agree that the net effect of trade liberalization is to increase real GDP, while acknowledging the possible relevance of the costs of adjusting to trade opening. Opening up increases a country's GDP because it improves the efficiency of its resource allocation. First, trade allows each country to specialize in the production of the goods that it can produce more cheaply and import the other goods, thus exploiting comparative advantages. Secondly, by extending the size of the market in which the firm operates beyond national borders, trade allows firms to exploit economies of scale. Thirdly, trade selects the most productive firms in the market.[4] The relationship between trade and growth is discussed further below (see Box B.1).

The positive relationship between trade and growth is illustrated by Figures B.6 and B.7. Figure B.6 shows that rising share of world trade in GDP has been accompanied by rising per capita GDP since 1980. Whether GDP growth caused trade to grow faster or trade caused GDP to accelerate is difficult to establish with any degree of certainty. It is most likely that it runs both ways. However, Figure B.6 reveals an important long-run relationship between trade and GDP.

Figure B.7 shows real per capita GDP growth plotted against export growth since 2000. The strength of this relationship may be exaggerated by the fact that exports are a component of GDP. However, other measures of trade openness also consistently show a positive, if somewhat weaker, relationship between trade and growth.

Figure B.8 shows the average annual percentage change in GDP in two periods, 1990-2000 and 2000-11. It shows that world output grew faster in the last 11 years than it did in the preceding ten and that all categories of developing economies experienced faster growth

the second period. The fastest average growth in the 2000 period was recorded by oil-exporting LDCs (6.6 per cent per year on average, up from 1.2 per cent in the 1990s), thanks in part to rising prices of primary commodities in recent years. However, the performance of G-20 developing economies (some of which are natural resource exporters) was nearly as impressive (5.2 per cent per year on average, up from 3.9 per cent in the preceding decade).

LDC exporters of agricultural products also saw their incomes grow at an impressive 3.9 per cent per year since 2000, after recording a dismal performance in the 1990s, when incomes contracted by about 1.3 per cent per year (see also Section D).

Only developed economies recorded slower average growth in the 2000s than in the 1990s (0.9 per cent compared with 2.8 per cent), which may be partly explained by the global financial crisis that disproportionately affected advanced economies. However, even if we restrict ourselves to the pre-crisis period, i.e. 2000-2008, we see that advanced economies still grew more slowly in the 2000s (2.0 per cent vs. 2.8 per cent).

3. Rising share of developing countries in the world economy

Faster-than-average output growth raises countries' share in world GDP over time. This is shown in Figure B.9, which illustrates the increasing share of developing economies in world GDP at purchasing power parity. These countries raised their collective share in global output from 39 per cent in 2000 to 52 per cent in 2012. Much of the increase was due to the G-20 developing economies, which increased their share in exports from 25 per cent to 36 per cent. China alone more than doubled its share from 7 per cent to 15 per cent. India recorded a more modest increase from 4 per cent to 6 per cent over the same interval while Brazil was unchanged at 3 per cent and Mexico dropped from 3 per cent to 2 per cent. However, all LDCs combined still only accounted for around 2 per cent of world exports in 2012, up from 1 per cent in 2000.

Although Figure B.9 suggests that living standards are indeed improving in developing economies, it does not accurately reflect their importance as export destinations. This is because a country's ability to purchase imports depends more on its nominal dollar income than on income at purchasing power parity. From this perspective, the share of developing economies in world output rose to 40 per cent from 23 per cent between 2000 and 2012. This is a large increase but it illustrates that developing economies are still responsible for less than half of world income.

Figure B.10 illustrates the increasing share of developing economies in world merchandise exports

Figure B.6 World GDP per capita and share of exports of goods and services in world GDP
(2005 international dollars and percentage)
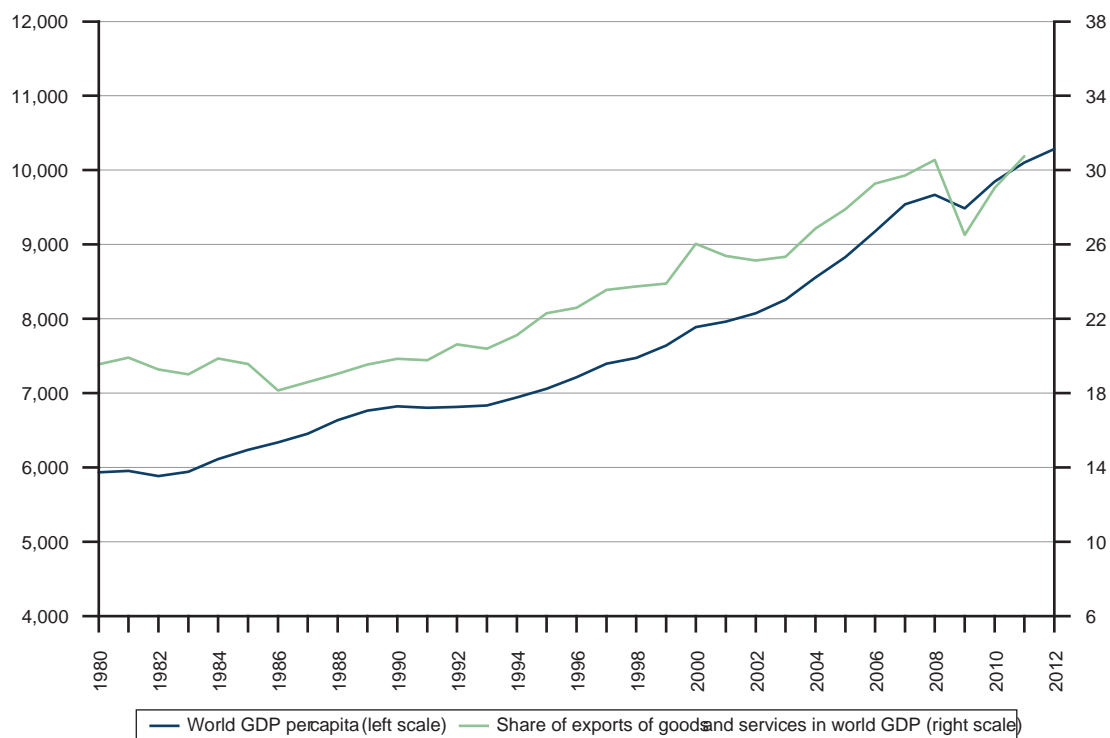
Source: World Bank World Development Indicators.

Figure B.7 Real per capita GDP growth and merchandise export volume growth, 2000…11
(average annual percentage change on both axes)
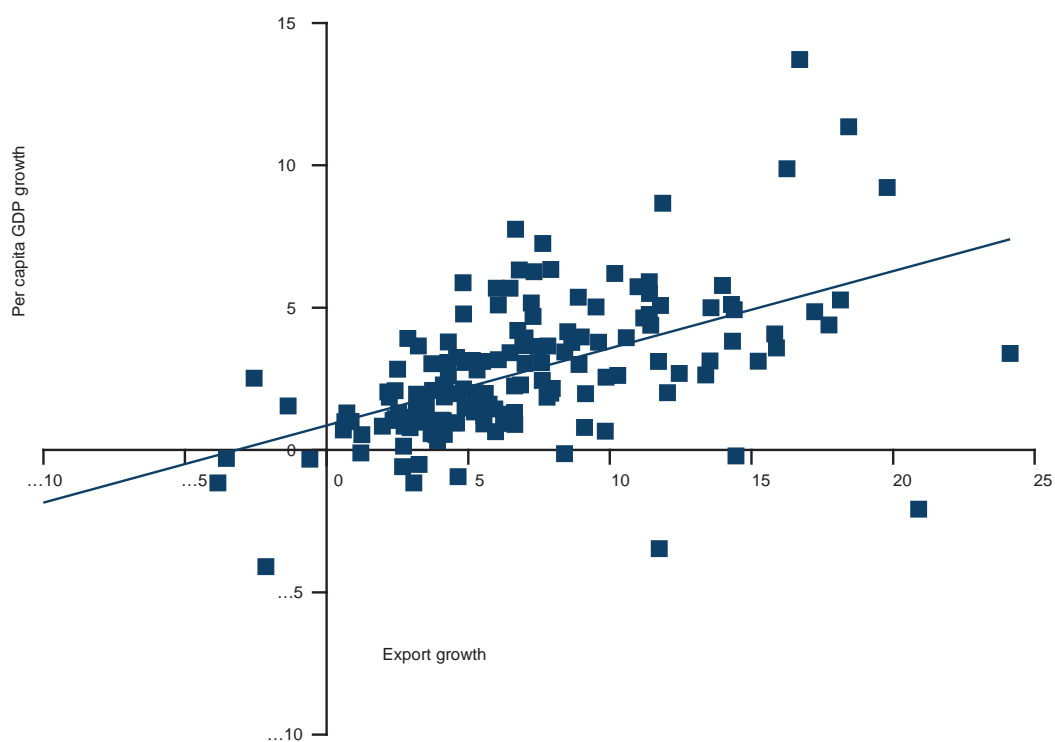
Source

Figure B.8 Average annual growth in per capita GDP at purchasing power parity by level of development, 1990…2011
(annual percentage change)

Legend: 1990-2000 | 2000-2011

Data values by category:
- World: 1.8, 2.4
- Developed economies: 2.9, 0.9
- Developing economies: 1.5, 4.7
- G-20 developing economies: 1.9, 5.4
- Other developing economies: 0.9, 3.8
- Least developed countries (LDCs): …0.7, 3.7
- LDC oil exporters: 1.2, 6.6
- LDC agricultural products exporters: …1.3, 3.9

B. THE INCREASING IMPORTANCE OF DEVELOPING COUNTRIES IN THE GLOBAL ECONOMY

4.   Heterogeneity of development experiences

As stated, growth is just one aspect of development. If rising output and higher incomes did not allow people to obtain a better standard of living, development would not be worth pursuing. The evidence suggests that per capita GDP growth does improve several dimensions of quality of life, but these gains are not uniformly distributed. In this section, we measure various aspects of development and development policy, using a human development index (excluding GDP per capita), an income inequality measure (Gini) and an environment quality index.

(a)   Human development indicators and income growth

Exploring the relationship between growth and living standards could be undertaken in many ways. Common measures of well-being include health (e.g. life expectancy at birth, infant mortality), nutrition (intake of calories, incidence of disease), and opportunity/social mobility (literacy rates, economic and gender inequality, etc.). Examining each of these indicators separately would duplicate much of the work in the Millennium Development Goals Report (2013) so this report focuses on a composite indicator in the form of the World Bank s Human Development Index (HDI). Box B.2 discusses how close we are to attaining the

Millennium Development Goals. The standard version of this index combines life expectancy at birth, average years of schooling and per capita gross national income but this report uses an alternative version that excludes income in order to avoid comparing like with like.

Appendix Table B.2 includes combinations of output growth and human development performance for all available countries. It shows that countries with above average growth in output do not always have above average changes

Box B.2: How close are the Millennium Development Goals to being achieved?   (continued)

PovcalNet database. By 2011, some countries had managed to cut extreme poverty by more than half, well in advance of the 2015 deadline, while others remained far from achieving this.

Some countries have significantly exceeded their targets notably China, Viet Nam, Pakistan and Nepal. However, the share of the population in extreme poverty has actually increased in a few African countries, notably Kenya and Zambia.

Trade can help to contribute to achieving several of the MDGs, especially the first (eradication of poverty and hunger) and the eighth (global partnership for development). Trade helps to achieve the first goal to the extent that greater access to international markets boosts exports, which contribute positively to GDP. Trade can also make firms in developing economies more efficient by giving them access to larger markets, thereby allowing them to take advantage of economies of scale. Imports can also help to reduce the burden of poverty by increasing competition and giving low-income consumers access to less expensive goods, both imported and domestically produced.

The main contribution of the WTO to the goal of developing a global partnership for development was intended to be the conclusion of the Doha Round of trade negotiations with an agreement that reflected developing country concerns. Although the Round has not yet been completed, the agreement reached at the Bali Ministerial Conference was a positive step in that direction.

Figure B.13 Per capita GDP growth and income inequality in developing economies, 2000…11 (average annual percentage change and change in Gini coefficient)
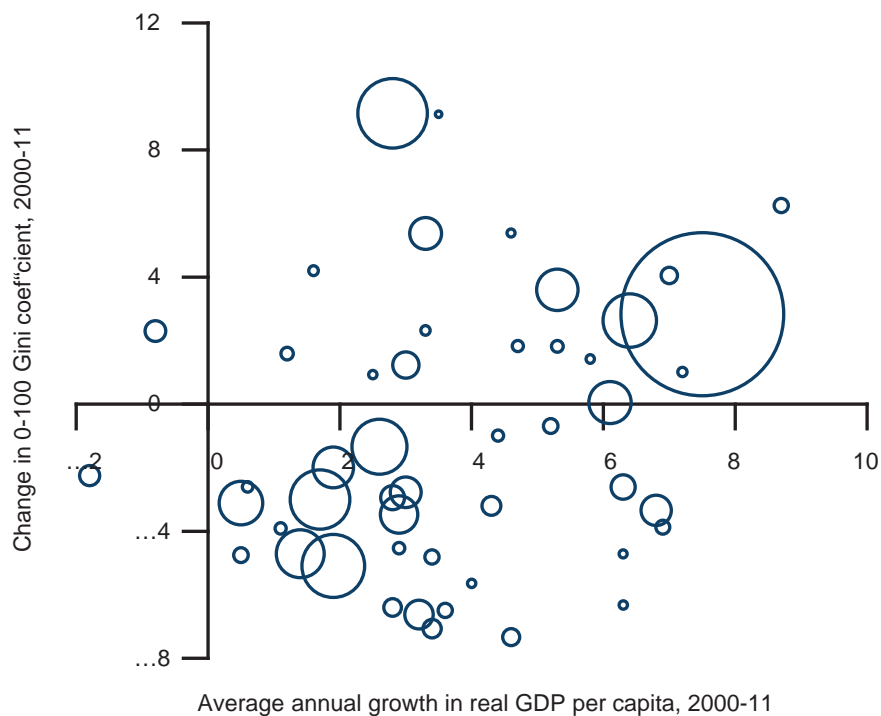
Sources: Penn World Tables 8.0 for real GDP, World Bank for Gini coefficients.

Note: The world average change in the Gini index between 2000 and 2011 was 1.3. The size of each data point signifies the country s population.

living in absolute poverty and reduced inequality. Most recently, the impressive growth of many Asian economies has proceeded together with a significant increase in the size of the middle class.

The specific reasons for economic growth and government policies at the country level explain the different growth and inequality trends. For example, a number of empirical studies show that the relationship between GDP per capita and inequality mainly depends on technological changes. The main determinants of wage inequality in developing countries are skill-biased technological changes because

suggests that trade is unlikely to have had an impact on inequality through the traditional channels of shifting demand for production factors (Haskel et al., 2012). Inequality is principally driven by technological changes, increased demand for skilled labour, and FDI-enhanced types of taxation choices made by governments (Feenstra and Hanson, 1997).

Economic literature on the Asian miracle has highlighted the role of the government, land reforms and universal education to explain the good performance of Asian countries. According to Stiglitz (1996), redistribution policies increased the ability of the median citizen to consume, thus providing an additional boost for growth through domestic consumption and investment.

(c) Environmental impact of economic development

Another important dimension of development beyond income is environmental quality. As with the Human Development Index cited above, we have relied on a composite index to gauge the strength of the relationship between incomes and environmental performance for all available countries. The measure used in this report is the Environmental Performance Index (EPI) produced by the Yale Centre for Environmental Law and Policy.

The index is based on 22 indicators of environmental health and eco-system viability, including pollution, access to clean drinking water, sulphur dioxide (SO_2) emissions, carbon dioxide (CO_2) emissions, agricultural subsidies and critical habitat protection. Higher values of the index represent better environmental quality. Among the fast-growing developing economies, some have improved their EPI performance while others have seen a deterioration.

Figure B.14 shows a positive relationship between the EPI and per capita income. This suggests that countries with higher incomes are better able to pay for preserving their environment. To the extent that trade and other policies can promote economic growth, they may indirectly help to clean up the environment.

Environmental economics refers to the Environmental Kuznets Curve (EKC) to identify a correlation between income per capita and environmental degradation. The hypothesis is that environmental quality degrades at the early stages of development while beyond a certain income level environmental quality improves (Grossman

Table B.4: Tariffs on imports from LDCs in developed and selected G-20 developing economies, 2002…12 (US$ million and per cent)

	Import values (US$ million)				Weighted average tariffs, including preferences [a] (per cent)			
	All sectors	Non-oil	Agricultural (AOA)[b]	Non-agricultural (NAMA)[c]	All sectors	Non-oil	Agricultural (AOA)[b]	Non-agricultural (NAMA)[c]
Developed economies								
2002	23,683	16,880	1,664	15,216	2.4	4.0	2.8	4.2
2007	58,377	30,603	3,283	27,320	2.1	3.4	1.9	3.6
2012	83,059	46,492	5,233	41,259	2.1	3.5	0.9	3.8
Selected G-20 developing economies[d]								
2002	4,969	4,221	218	4,003	1.9	5.3	13.3	3.1
2007	31,149	26,728	1,027	25,700	1.0	4.4	17.6	1.7
2012[e]	63,657	46,777	1,664	45,113	0.4	1.2	5.2	0.8

Source: WTO Secretariat estimates based on IDB data.

[a] Weighted averages for developed economies use fixed weights for all three years.

[b] Agricultural products as defined in Annex 1 of the WTO Uruguay Round Agreement on Agriculture (AOA).

[c] i.e. non-agricultural market access, referring to all products not covered by the WTO Agreement on Agriculture.

[d] Includes Brazil, China, Indonesia, Republic of Korea, Mexico, South Africa and Turkey.

[e] Tariff data are available for all G-20 developing economies other than Argentina in 2012. For this group of countries, weighted average tariffs on LDC imports are 1.3 per cent for all sectors, 1.3 per cent for non-oil, 3.8 per cent for agriculture and 1.2 per cent for non-agriculture.

All country groups shown in Table B.3 have liberalized trade since 1996 but the trade opening in G-20 developing and other developing economies has been the most significant. G-20 developing countries have reduced their MFN applied rate by over 5 per cent, have bound over 80 per cent of their tariff lines and reduced their bound rates by approximately 10 per cent over the last decade. While the change in the MFN rate in other developing economies was roughly in line with the change for the world as a whole, these countries also reduced their bound rates sharply (by 7 per cent) and substantially increased the number of bound lines (by 22 per cent).

China's accession to the WTO in 2001 played a major role in its opening to trade. China's simple average tariff has fallen from about 40 per cent in 1985 to under 10 per cent today. Ianchovichina and Martin (2001) created a counterfactual scenario for Chinese tariffs if the country had not joined the WTO. They estimate that China's accession might have lowered its weighted average tariff protection on imports from 21.4 per cent to 7.9 per cent.

A large body of research exists showing the positive impact of China's accession in terms of economic growth, trade and investment.[8]

The trade opening of G-20 developing economies has expanded export opportunities for these economies in general and for LDCs in particular. This is illustrated by Table B.4, which shows the evolution of tariffs applied by developed economies and selected G-20 developing economies on imports from LDCs. The G-20 developing economies in the table are limited to those with data for all periods shown, i.e. 2002-12. Tariffs on LDC imports have fallen more rapidly in G-20 developing countries than in developed countries since 2002. Much of this decline is due to the opening of the Chinese market, which carries a large weight in this group of importers.

In recent years, LDCs and other developing countries have also significantly increased their exports to G-20 developing countries, particularly those in Asia. The share of Africa's exports to developed economies fell from 72 per cent in 1995 to 53 per cent in 2012 (see Figure B.15). A similar pattern was observed in South and Central America and in the Middle East, although it was not as marked as in Africa. For most developing countries, the emergence of large new markets has led to an increase in total exports rather than diversion from traditional trading partners towards new ones. Trade expansion to these markets also reduces output volatility for vulnerable economies.

However, not all products and countries benefit to the same extent from these new market opportunities. Exports from African countries to developing economies are concentrated in primary products, especially oil. This trend is particularly evident in Africa's exports to developing Asia (i.e. Asia excluding Australia, Japan and New Zealand). In 2012, fuels accounted for about 69 per cent of all exports from Africa to these countries, compared with a 65 per cent share in exports to

Figure B.16 Merchandise exports of Africa to developed economies and developing Asia by product, 1995…2012
(per cent)
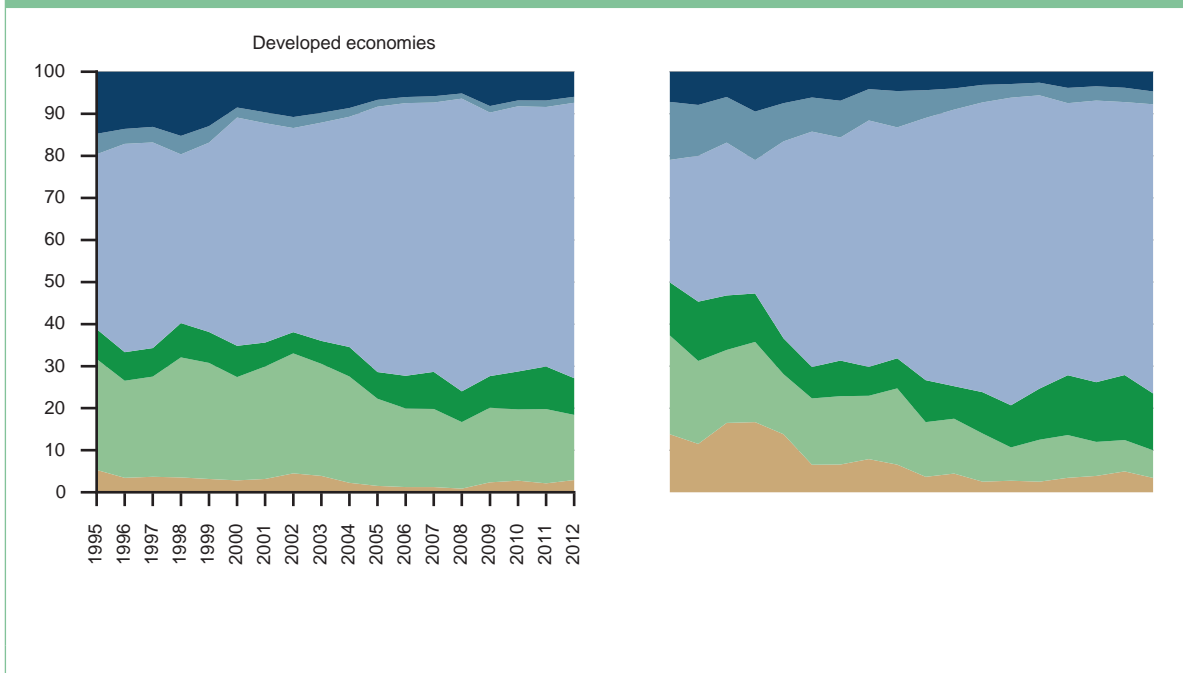
Economy	Real GDP per capita 2011[a] (2005 US$)	Growth in real per capita GDP 2000-11[a] (average annual percentage change)	Environmental Performance Index (0-100)		Non-income Human Development Index (0-100)		Trade/GDP ratio (period average)		Trade-weighted average tariff (per cent)		Gini (0-100)	
			2000[a]	2010[a]	2000[a]	2012[a]	1998-2000[a]	2010-2012[a]	2000[a]	2011[a]	2000[a]	2011[a]
Other developing economies												
Albania	7,365	4.6	59	66	77	81	25	42	11.3	1.3	29	35
Antigua and Barbuda	12,909	0.3	..	..	..	78	72	51	15.5	14.6	..	..
Armenia	5,235	6.3	45	47	77	81	36	35	2.4	2.3	36	31
Azerbaijan	9,317	11.9	34	43	..	78	37	39	6.6	3.9	..	34
Bahamas	19,367	2.3	..	..	..	78	41	48	28.6	18.9	..	..
Bahrain, Kingdom of	20,676	2.4	..	..	77	81	71	62	7.9	5.7	..	..
Barbados	20,642	0.9	..	..	80	86	54	56	21.0	14.8	..	..
Belarus	15,353	6.9	49	54	..	83	..	72	8.9	1.8	30	26
Belize	7,367	1.6	..	..	72	77	57	61	11.2	11.1	53	..
Bolivia, Plurinational State of	4,167	3.6	54	55	68	74	21	37	8.5	3.7	63	56
Bosnia and Herzegovina	7,581	3.9	38	37	..	79	59	49	5.1	1.5	..	..
Botswana	11,811	3.4	48	54	55	60	46	46	1.5	3.6	..	..
Brunei Darussalam	67,544	4.5	62	62	79	83	55	45	9.5	4.1	..	..
Cameroon	1,858	0.1	42	43	43	52	24	26	13.5	11.9	..	..
Cabo Verde	4,126	5.2	..	..	58	62	41	53	..	10.2	..	..
Chile	15,243	4.3	53	55	80	86	28	35	9.0	4.0	55	52
Colombia	8,408	3.0	58	62	68	75	16	18	11.0	5.6	59	56
Congo	2,427	2.6	47	47	50	55	66	Verde8	11.0	51e4oi128830(()n3741588..)]2726([(C

Environmental
Performance

(average
annual
percentage
change)   2010a   2000atariff