



# United Nations Conference on Trade and Development

Distr.: General  
23 December 2008

Original: English

---

**Trade and Development Board**  
**Trade and Development Commission**  
**Multi-year expert meeting on commodities and development**  
Geneva, 3–5 March 2009  
Item 3 of the provisional agenda  
**Development and challenges in commodity markets:  
current situation and outlook**

## **Recent commodity market developments: trends and challenges**

**Note by the UNCTAD secretariat**

### *Executive summary*

Primary commodity prices have tended to move in cycles that are highly correlated with fluctuations in global aggregate demand. After a period of steady declines from 1995 to 2002, international commodity prices reversed course and after 2002 experienced sustained increases, rising to unprecedented levels in the first half of 2008. However, since mid-2008, commodity prices have fallen sharply in a reversal of recent trends. This background note reviews recent developments in commodity markets highlighting short- and medium-term price trends, factors affecting demand and supply, and the evolving pattern of trade in such sectors as agriculture, forestry, fisheries, energy, and minerals and metals. It also identifies some of the key challenges facing commodity-dependent developing countries.

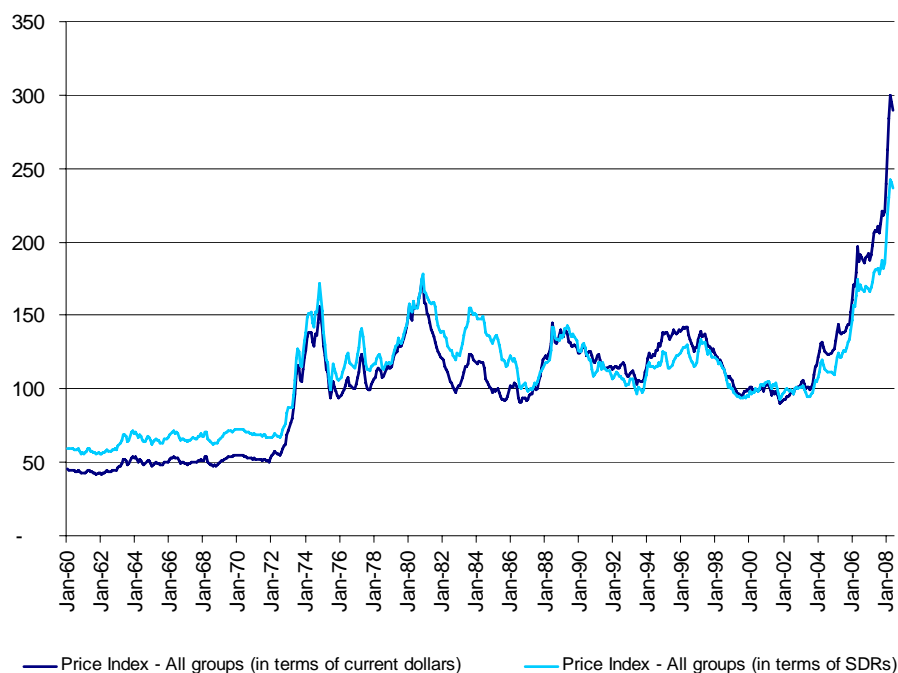
## I. Introduction

1. This background note has been prepared by the UNCTAD secretariat to assist the multi-year expert meeting on commodities and development in its deliberation under item 3 of the provisional agenda of its first session. It reviews recent developments in commodity markets, highlighting short- and medium-term price trends, factors affecting demand and supply, and trade in such sectors as agriculture, forestry, fisheries, energy, and minerals and metals. It also identifies some of the key challenges facing commodity-dependent developing countries in these sectors.

## II. Recent commodity price trends: a cycle of boom and bust

2. Primary commodity prices have tended to move in cycles that are highly correlated with fluctuations in global aggregate demand. Over the past 48 years, commodity prices have followed a cyclical pattern of rising and falling prices of varying amplitudes and durations (see figure 1). After a period of steady declines from 1995 to 2002, international commodity prices reversed course and after 2002 experienced sustained increases, rising to unprecedented levels in the first half of 2008. However, since mid-2008, commodity prices have fallen sharply in a reversal of recent trends.

**Figure 1. Average monthly price indices for non-fuel commodities (2000=100)**



Source: UNCTAD commodity price statistics.

### A. The price boom

3. The amplitude of the recent rise in commodity prices is unprecedented. By mid-2008, UNCTAD's price index for non-fuel commodities reached its highest level in current dollars since 1960 (see figure 1), rising 113 per cent between 2002 and 2007, and 34 per cent in the first six months of 2008, compared to the 2007 level. The broad-based rise in

prices was led by the boom in metal and mineral prices which, in the aggregate, increased 261 per cent between 2002 and 2007 and again by 18 per cent in the first half of 2008 (see table 1). The price of oil also rose sharply – from a 2002 average monthly level of \$25 per barrel to an average of \$108 per barrel in the first half of 2008. In fact, in July 2008, oil traded for as much as \$147 per barrel, although it subsequently retreated.

4. Among the agricultural commodities, there were notable price increases from 2002 to mid-2008 for all sub-groups of agricultural products (food products, vegetable oilseeds and oils, agricultural raw materials and tropical beverages). In particular, the index of food prices rose to an all-time high, having risen 65 per cent in the period 2002–2007 and 51 per cent in the first half of 2008. The main movers have been essential staples such as wheat, rice and maize, which rose by 78 per cent, 73 per cent and 69 per cent, respectively, in the period 2002–2007. In the first six months of 2008, they rose again by 48 per cent, 121 per cent and 45 per cent, respectively.

**Table 1. Monthly average world primary commodity prices, 2002-2007, 2008  
(Percentage change over previous year monthly average)**

Commodity group	2002–2007 <sup>a</sup>	2008 (1st half) <sup>b</sup>	2008 (2 <sup>nd</sup> half) <sup>c</sup>
All commodities (excluding crude petroleum)	113	34	-35
Food	65	51	-31
Tropical beverages	67	24	-15
Vegetable oilseeds and oils	93	-	-48
Agricultural raw materials	80	26	-25
Minerals, ores and metals	261	18	-41
Crude petroleum	185	52	-50

*Source:* UNCTAD secretariat calculations based on UNCTAD Handbook of Statistics 2008 and UNCTAD commodity price statistics.

*Note:* Prices are in current dollars.

<sup>a</sup> Percentage change between 2002 and 2007.

<sup>b</sup> Average monthly prices for first half of 2008 compared to 2007 monthly average.

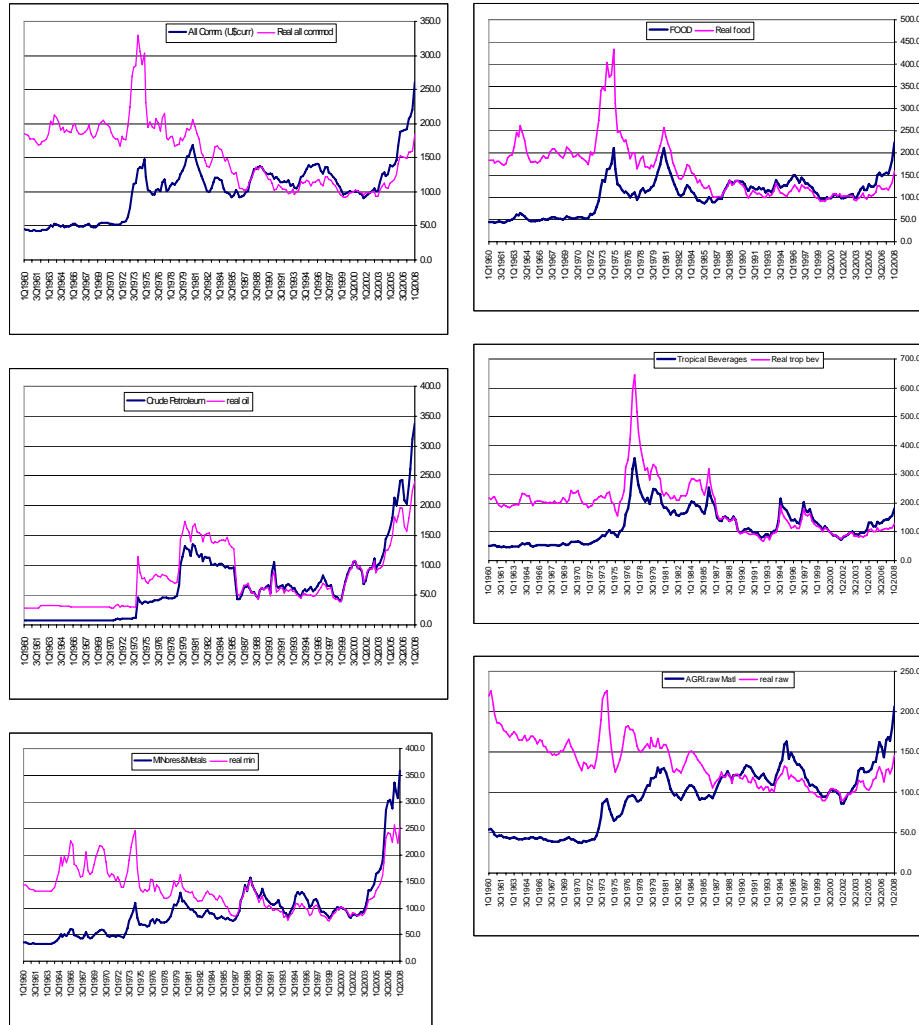
<sup>c</sup> Percentage change from the peak monthly price recorded in 2008 in comparison with the November 2008 monthly price.

### **The historical perspective**

5. Although remarkable, it is useful to place the recent boom in commodity prices in historical perspective. Figure 2 charts the prices of major groups of commodities from 1960 to the second quarter of 2008, in both nominal and real terms. As will be noted, from around 1980 to about 2002, the price index for all non-fuel commodities was on a declining trend in both nominal and real terms, with a sharper fall in real terms. All major commodity groups also experienced real price declines. For most commodity groups, while the current boom has brought about some improvement in prices in real terms, these are not at all-time highs as in the case of nominal prices. In fact, only in the case of petroleum and the minerals, ores and metals group are prices at all-time highs in both nominal and real terms. It is noteworthy that, despite the recent price increases, tropical

beverage prices, in both nominal and real terms, are still below their historic highs of the late 1970s and their recent highs of the mid-1990s.

**Figure 2. Commodity prices, nominal and real (1<sup>st</sup> quarter 1960–2<sup>nd</sup> quarter 2008; 2000=100)**



Source: UNCTAD commodity price statistics.

**B. Factors behind the boom in prices**

6. The driving forces behind the recent boom in commodity prices have been a combination of strong global demand, due to brisk economic growth worldwide – particularly Asia, led by China – and a slow supply response, together with low inventories for a number of commodities, particularly oil, minerals and metals, and grains. The increase in dollar-denominated commodity prices is also partly explained by the depreciation of the dollar vis-à-vis other major currencies. A devaluation of the dollar reduces the foreign currency price of dollar-denominated commodities and thus boosts demand. Also, a major factor in the recent rise in demand for – and prices of – some agricultural commodities, particularly maize and oilseeds, is the expansion in demand for biofuels, which is closely linked to developments in energy prices. Finally, commodity prices were also influenced by speculation, fed by high liquidity in international financial

markets and relatively low interest rates, seeking higher returns in comparison to equity and debt securities.

7. On the supply side, the response of production to rising demand was initially sluggish, particularly for energy and metals and minerals. A prolonged period of low prices, coupled with the long lead times in mining investment, led to slow capacity growth for many years and meant that supply could not catch up with the sudden increase in demand. Consequently, inventories of metals have been drawn down and are now extremely low. In the case of oil, strong global consumption growth since 2003, largely accounted for (nearly two thirds) by China, India and the Middle East, has met only a sluggish supply response compounded by production shortfalls associated with geopolitical unrest in countries with large oil reserves. Non-Organization of the Petroleum Exporting Countries (OPEC) production growth has been outpaced by world oil consumption growth every year since 2003. Thus, the gap has had to be filled by OPEC production and/or inventories, leaving OPEC spare capacity at low levels and market conditions quite tight. These market conditions and the concentration of surplus capacity in a few countries have not only kept upward pressure on oil prices, but also increased volatility, as prices react strongly to actual or perceived supply disruptions.

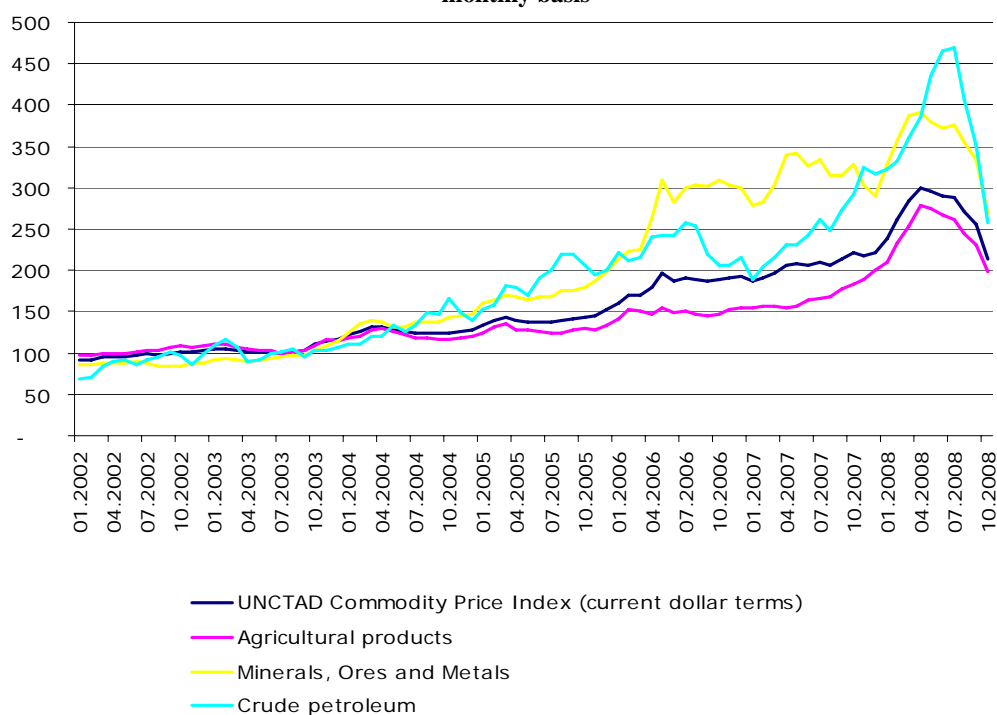
8. The pattern of price developments in the agricultural sector was due to many factors. Supply constraints in the face of strong growth in consumption for food and feed – due to shifts in the composition of food demand in rapidly growing Asian countries towards high protein foodstuffs, as well as policy-driven high growth in demand for biofuels produced from coarse grains and vegetable oils – have triggered tightness in the grain and oilseed sectors. The high costs of fuel and fertilizers have added to the cost of agricultural production and also contributed to higher prices. High feed prices have in turn raised costs for animal production and resulted in an increase in livestock and dairy prices. Moreover, as a precautionary measure to ensure adequate supplies at stable prices on their own markets, some exporting countries, in reaction to bad harvests and dwindling stocks worldwide, have taken actions to restrict exports, thus further limiting the supply available to meet trade demands. This development has been particularly important in the case of rice, triggering the huge spike in prices since 2007.

9. In the past three to five years, actual and projected tight market conditions in all major commodity markets (fuel, metals and food) have generated expectations of further price increases and attracted a significant increase in investments in commodity derivative markets from non-traditional commodity participants, whether for portfolio diversification or speculation. This has likely contributed to the rise in short-term commodity futures prices and is an additional factor in the current spike in spot market prices.

### **C. A reversal of price trends**

10. As indicated in figure 3, the rising trend in commodities prices which accelerated in the second half of 2007 peaked in the middle of 2008, and then fell sharply. By December 2008, non-fuel commodity monthly prices had fallen 35 per cent in the aggregate from their peak registered in April 2008 (see table 1). Average monthly petroleum prices had fallen 50 per cent from their July 2008 peak; minerals, ores and metals 41 per cent from their April 2008 peak; and food 31 per cent from their peak also recorded in April.

**Figure 3. Commodity price indices (Jan. 2002–Oct. 2008)**  
monthly basis



Source: UNCTAD commodity price statistics.

#### D. Factors driving the decline in prices

11. The driving forces behind the reversal of the recent boom in commodity prices are a combination of weakening global demand growth brought about by slower global economic growth, increased supplies and revised expectations. Already in early 2007, the climb in commodity prices had faltered somewhat due to slower economic growth in developed countries, particularly in the United States. However, the continued fast pace of economic growth in developing countries – especially China (at double-digit growth rates) and other Asian countries that had become the principal new source of growth in demand for a wide range of industrial raw materials – led to expectations that global demand for commodities would remain strong. In the first half of 2008, it was becoming increasingly evident that the United States economy was slowing down and that it could enter a recession. Fears of a recession in the United States grew stronger in September 2008 as the scale of the subprime-induced financial crisis became more evident. As the financial crisis spread to other markets, it also became clear that, given the interdependence of emerging market economies with the United States economy through exports, a deep recession in the United States would also drag down those economies. At that point, previous expectations of continued strong demand for commodities from emerging markets evaporated. The precipitous fall in commodity prices was also exacerbated by massive liquidation of long positions in commodity futures markets, as financial investors and speculators responded to changing expectations.

12. On the supply side, new investments in exploration and mining, induced by recent high prices, started to bring new capacity into operation. In the case of food commodities, the high price incentive also led to increased planting and, along with favourable weather conditions, expectations of a new record in the harvesting of cereals by the end of 2008.

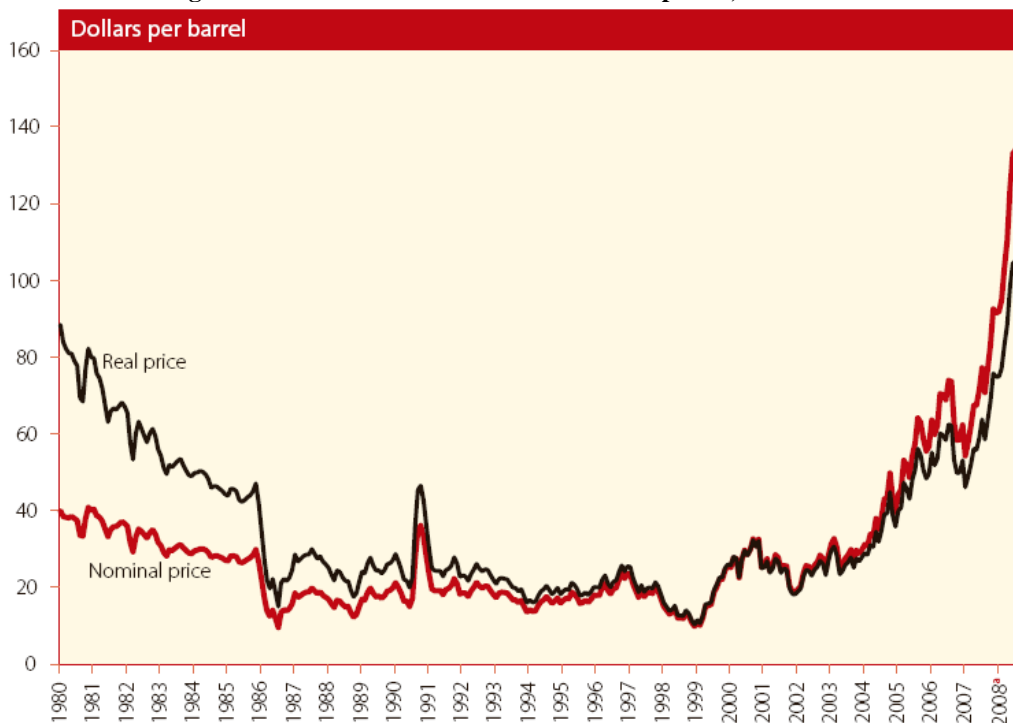
13. The medium-term prospects for commodity prices will depend on the outlook for global economic growth. Expectations of a sharp slowing of growth over the next year have already caused prices to decline rapidly. The extent to which prices will fall further, or stabilize at much lower levels, will depend very much on the evolution, in the months ahead, of the supply-and-demand balance in individual commodity markets. However, much weaker gross domestic product (GDP) growth worldwide will keep demand down. How quickly supply will adjust to lower demand remains to be seen, as does the response of the United States and other economies to the series of monetary and fiscal stimulus packages that have been announced.

### III. Commodity market developments: by sectors

#### A. Energy: oil and gas

14. Since 1980, the price of crude oil was on a declining trend, reaching a trough of \$10 in 1999 before prices started to recover (see figure 4). Since 2002, as mentioned above, the price of crude oil steadily recovered until it peaked in July 2008 at \$147 dollars a barrel. With the global financial crisis and fears of global recession, crude oil prices fell precipitously in a couple of months, to around \$40 a barrel in early December 2008.

**Figure 4. Nominal and real Brent crude oil prices, 1980–2000**



Source: UN/DESA, World Economic and Social prospects, 2009  
a Partly estimated.

15. There have been significant developments in global crude oil markets in recent years. A major new development has been the growing demand and consumption of crude oil by non-Organization for Economic Cooperation and Development (OECD) countries, especially developing countries. As shown in table 2, most of the increase in global demand for crude oil between 2002 and 2008 is accounted for by developing countries, with China and other Asian countries in the lead.

16. Increases in supply to meet rising global demand have come mainly from non-OECD sources, in particular the former Soviet Union and OPEC.

17. The recent boom-and-bust cycles in energy prices have been primarily determined by the fundamentals of both demand and supply as well as by international trading and financing arrangements within which those prices were shaped.

18. The increased demand for oil and other energy products during the last five years was driven by sustained high growth of the world economy, and especially that of emerging economies, led by China and oil-exporting countries. In the case of oil, it generated an annual demand of more than 8 million barrels per day (mbd), which was double the level for the previous five years. Relatively high growth rates were also recorded in the United States and other OECD countries, but more efficient energy conservation measures allowed higher economic growth with nearly the same level of energy consumption.

**Table 2. World oil supply and demand balance (million barrels per day)**

	1992	2002	2007	2008
<b>Demand</b>				
OECD	42.9	47.9	49.2	47.8
Non-OECD	24.7	29.8	36.9	38.4
Of which:				
China	2.6	5.0	7.5	7.9
Other Asia	4.9	8.0	9.3	9.5
Latin America	3.7	4.8	5.6	5.9
Middle East	3.9	5.2	6.5	6.9
Africa	2.1	2.6	3.1	3.1
Total Demand	67.6	77.7	86.1	86.2
<b>Supply</b>				
OECD	19.8	21.9	19.8	19.3
Non-OECD	19.5	24.5	27.8	27.6
Of which:				
Former Soviet Union	8.9	9.4	12.8	12.8
Non-OPEC	40.8	48.1	50.1	49.7
OPEC	26.7	28.9	35.5	37.5
Total Supply	67.5	77.0	85.6	87.2

*Source:* International Energy Agency, Annual Statistical Supplement, 2007; and Oil Market Report, 13 November 2008.

19. At the same time, the dramatic increases in oil prices, especially during the first half of 2008, cannot be attributed solely to changes in fundamentals. While the latter were more or less the same, prices displayed a record level of volatility. Moreover, during that period, to reply to international criticism and to show that price increases were more due to speculation rather than to world supply-demand balance, OPEC actually increased its supply from 35.5 mbd in 2007 to 37.5 mbd in the third quarter of 2008, which more than accounted for the increase in global supply from 85.6 mbd to 87.2 mbd, in spite of a marginal decrease in global demand. The resulting increase in stocks should have normally had a downward pressure on prices. However, increased speculation brought about first excessive rises in June–July 2008 and then falls in August–September in oil spot and futures prices.

20. The OECD share in world oil consumption has changed in two stages: (a) in the decade after the second oil shock, it decreased from 66 per cent in 1980, to 63 per cent in



1992; and (b) due to low prices in the 1990s, it stayed on the same level until the beginning of the millennium, i.e. 62 per cent in 2000, and then again started to decline, and has fallen to 55 per cent in 2008. In comparison, the share of developing countries rose from 17 per cent in 1992 to 33 per cent in 2008.

21. In 2007, i.e. during the last full year of the energy price boom, the world's primary energy (oil, gas, coal, nuclear and hydro-energy) consumption rose by 2.3 per cent and reached the level of 11,099.3 million tons of oil equivalent (mtoe). In 2007, the United States – with its per capita oil consumption still twice as much as in Europe and several times higher than in Asia – consumed energy equal to 2,360 mtoe, while China was second at 1,863 mtoe. In fact, the highest-consuming region was Asia–Pacific which, even without Japan, consumed 3.2843 billion tons of primary energy in 2007.<sup>1</sup>

22. In the case of gas, international trade is concentrated mainly between the Russian Federation and Europe. While coal is less important in international trade, it is becoming increasingly tradable, especially in the Asian region. China, by far the biggest producer of coal, is mainly consuming it domestically, while two main trading partners in coal are two developed countries: Australia as exporter and Japan as importer.

23. The global economic downturn and gloomy prospects for growth, which became evident at the end of 2008, dramatically changed the short-term outlook for prices and demand. As a result, OPEC, during the last quarter of 2008, twice decided to cut production cumulatively by 4.2 mbd. While OPEC members dispose of nearly 80 per cent of world proven reserves (exceeding 40 years of global annual production), they are responsible for less than half of global production. As one of the assessments suggests, in 2008 demand for oil in the OECD area will fall by 3 per cent, with a further 2 per cent fall in 2009 and 1 per cent in 2010. Similarly for non-OECD countries, the demand is expected to be 2.8 per cent in 2009–2010.<sup>2</sup> Later, slack may disappear due to increased demand and insufficient supply, and again market conditions would become tight.

24. Given low price elasticity of both supply and demand for energy, and in case of the absence of exogenous energy market shocks, it would have taken time until the supply responded to price signals and brought prices to more reasonable levels from a trade and development perspective. However, the exogenous shock of the financial crisis dramatically changed the situation, causing falls in prices and contraction in demand. While lower prices bring relief to importers, the fall in prices halts many investment plans and hence expected structural changes in the energy sector. Lower prices also mean fewer resources to develop more sustainable energy production and usage models.

## A. Metals and minerals

25. Changes in the global pattern of demand for minerals and metals are quite similar to that of oil consumption. Developing countries – particularly in Asia, with China in the lead – have accounted for most of the increase, with a rise in their share of global imports from 28 per cent to 38 per cent between 1995–1997 and 2004–2006, respectively.

---

<sup>1</sup> BP Statistical Review of World Energy, June 2008; [www.bp.com](http://www.bp.com).

<sup>2</sup> EIU December oil outlook, 25 November 2008.

**Table 3. Share of imports and export of ores and metals by regions and selected countries (in % of total, 3 years average)**

<b>Imports</b>	<b>1995–1997</b>	<b>2004–2006</b>
<b>Developed economies</b>	<b>70%</b>	<b>60%</b>
<b>Developing economies</b>	<b>28%</b>	<b>38%</b>
of which:		
Asia	24%	33%
of which:		
China	3%	14%
India	1%	2%
<b>Economies in transition</b>	<b>2%</b>	<b>2%</b>
<i>World imports (\$ billion)</i>	<i>182</i>	<i>407</i>
<b>Exports</b>		
<b>Developed economies</b>	<b>62%</b>	<b>56%</b>
<b>Developing economies</b>	<b>30%</b>	<b>37%</b>
of which:		
Asia	13%	16%
of which:		
China	2%	4%
India	1%	2%
<b>Economies in transition</b>	<b>8%</b>	<b>7%</b>
<i>World exports (\$ billion)</i>	<i>163</i>	<i>374</i>

Source: UNCTAD trade statistics.

26. China has been a major factor in global demand for mineral and metals in recent years. As indicated in table 4, the share of China in world global metal imports rose substantially between 2002 and 2006. While China increased its imports of copper ores and iron ores, its share of imports of copper and steel decreased. Mining refineries have been developed in China, which became one of the main metal producers.

**Table 4. World imports of selected metals and minerals and China's share in world imports (2002 and 2006)**

	<b>World imports (value in \$ billion)</b>		<b>Share of China in world imports</b>	
	<b>2002</b>	<b>2006</b>	<b>2002</b>	<b>2006</b>
Aluminium ores and concentrates (incl. alumina)	6.5	14.8	11.7%	22.6%
Copper ores and concentrates; copper mattes, cement	6.0	33.6	13.5%	18.7%
Iron ore and concentrates	13.0	47.1	21.2%	44.4%
Nickel	6.7	23.0	5.5%	11.3%
Nickel ores and concentrates; nickel mattes, etc.	2.2	8.9	1.0%	14.5%
Tin	1.2	3.6	7.8%	9.8%
Zinc	4.6	15.5	6.1%	9.4%

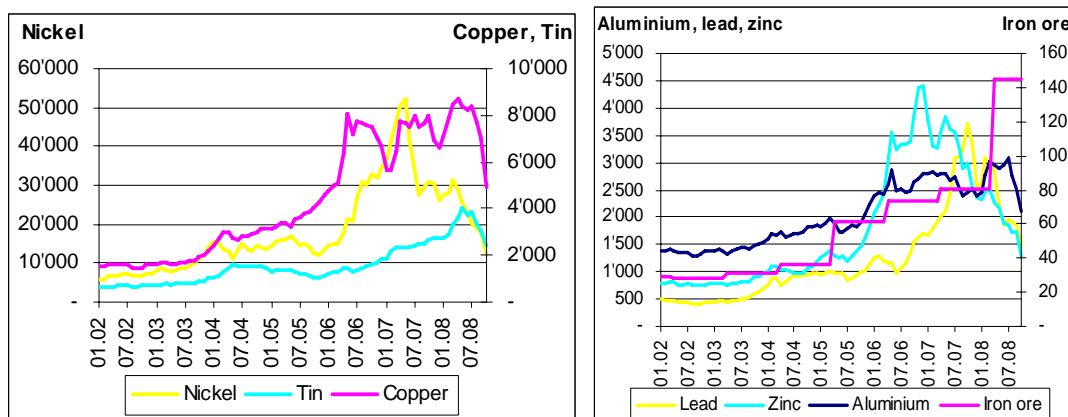
Source: UNCTAD trade statistics.

27. On the supply side, exporting developing countries have seen their share of global exports rise from 30 to 37 per cent from 1995–1997 to 2004–2006, while the shares of both developed countries and countries in transition have fallen during the same period. Some developing countries, dependent on their mining sector exports, substantially increased their export earnings: in Peru, for example exports of copper ores and concentrates increased by 1,211 per cent from 2002 to 2006, in Botswana by 554 per cent, and in Chile by 438 per cent. Indonesia's exports of nickel ores and concentrates increased by 581 per cent, Mauritania's exports of iron ores and concentrates by 285 per cent.

28. The pace and levels of price increases in metals and minerals in recent years have been unprecedented and well above their long-term average. The prices escalated dramatically for almost all base metals from 2006 to mid-2008, but have started to decline since (see figure 5). UNCTAD's mineral, ores and metal index rose sharply from 2002 to 2006, outstripping growth rates of other commodities groups' indexes. Major base metals and minerals markets were exceptionally strong. The peak was attained in April 2008. Prices for some individual metals achieved spectacular growth rates, indicated in table 6.

29. Factors behind the price movements in the period 2002–2007 included strong world economic growth which generated growing demand for non-ferrous metals, especially in the resource-intensive emerging economies of Asia, and in particular in China and India. At the same time, the mining industry, depressed by low prices in 1980s and 1990s, experienced large mergers, takeovers, restructuring and deceleration of investment. Despite stable metals output growth, stocks for many of them (copper, nickel, lead and zinc) the respective balances were negative in 2004–2006. The supply–demand imbalances resulted in considerable volatility and were the major factors influencing the price rise. An additional factor influencing the base metals price rise was the continuing depreciation of the dollar. Finally, the speculative activities in the futures markets also contributed to the price rise. Metals, as other commodities items, became in the last five years an investment asset, assuming sometimes better yields than traditional financial instruments, thus attracting potential institutional investors discouraged by the underperformance of the stock markets.

30. The second half of 2008 marked a sharp downturn in the world's economic situation. The financial sector crisis spread to the real sector, the result of which was the collapse of almost all base metals prices. In six months, the summary index fell by 31 per cent. Global uncertainties have made metals markets extremely volatile – by October 2008, prices for nickel fell by 58 per cent from their peak, and by 60 and 42 per cent for lead and copper, respectively. Even gold, considered widely as a safe haven during economic turmoil, recorded a decrease, though it was not as pronounced as for other base metals. Nevertheless, by the end of November, prices were well over the historical trend.

**Figure 5. Minerals, ores and metals prices for January 2002–October 2008****Table 5. Changes in prices of selected metals (January 2002–October 2008)**

	Change (%)		
	Jan. 2002– Jan. 2008	Jan. 2008– Apr. 2008	Apr.2008– Oct.2008
Minerals, ores and metals index (2000=100)	285	19	-31
Aluminium	79	21	-28
Copper	370	23	-43
Iron Ore	370	0	0
Lead	409	8	-48
Nickel	358	4	-58
Tin	323	33	-34
Zinc	195	-3	-42
Gold	216	2	-11

Source: UNCTAD, commodity price statistics.

Note: Iron ore, Brazilian to Europe, Vale, 64.5% Fe content, FOB (¢/Fe unit);

Aluminium high grade, LME, cash (\$/t);

Copper, grade A, electrolytic wire bars/cathodes, LME, cash (\$/t);

Nickel, LME, cash (\$/t);

Lead, LME, cash settlement (\$/t);

Zinc, special high grade, LME, cash settlement (\$/t);

Tin, LME, cash (\$/t);

Gold, 99.5% fine, afternoon fixing London (\$/troy ounce).

31. Despite the rather bleak world economic outlook and further uncertainties concerning short-term growth prospects for developed countries, further expansion of the production of almost all base metals, although at a slower pace, is forecast for 2008–2009. The price bubble, generated by speculative investment, seems to be exhausted and further significant substantial price decrease is unlikely, cash costs of production for many base metals (for copper for example) being close to or even higher than market prices. Resource-intensive economies such as China will continue to support increase in demand for most metals and minerals. Output growth of China – though revised to lower rates than in previous decades, and especially with the announced anti-crisis measures associated with the stimulation of the domestic consumption and large infrastructural projects – will support the demand growth rates at reasonable levels. Since corporate activity is going down, especially in depressed automobile and construction industries, a severe downturn

in developed countries' metal demand is highly probable with the falling growth forecasts. Global metals' demand will thus grow at rates well below their long-term average rates.

32. On the supply side, higher prices had a stimulating effect on the volume of investment in exploration and production. Investment in mining has jumped in recent years and is expected to increase at least in a medium-term perspective.

### A. Agricultural products

33. Developed countries are the biggest exporters of food commodities in the international markets. This is in large part due to heavy subsidies to their agriculture. In fact, the inability of developing countries to compete with the subsidized agriculture of developed countries has turned them into net importers of food produced in developed countries.

34. Table 6 provides an indication of the evolution of the shares of major groups of countries in global food exports and imports over the last decade. For example, while there has been a small reduction in the share of developed countries in both global imports and exports, their export share is still twice that of developing countries; and on the import side, the share is more than two and a half times that of the developing countries.

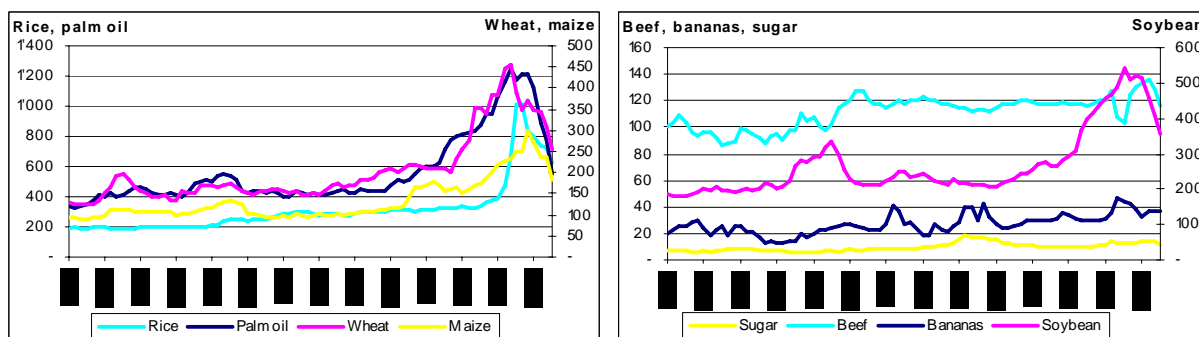
**Table 6. Share of imports and exports of food (excluding fish) by regions and selected countries (in % of total, 3 years average) over the period 1995–1997 to 2004–2006**

<b>Imports</b>	<b>1995–1997</b>	<b>2004–2006</b>
<b>Developed economies</b>	<b>70%</b>	<b>69%</b>
<b>Developing economies</b>	<b>27%</b>	<b>27%</b>
<i>of which:</i>		
Asia	17%	17%
<i>of which:</i>		
China	2%	3%
India	0%	1%
<b>Economies in transition</b>	<b>4%</b>	<b>4%</b>
<i>World imports (\$ billion)</i>	<i>476</i>	<i>704</i>
<b>Exports</b>	<b>1995–1997</b>	<b>2004–2006</b>
<b>Developed economies</b>	<b>67%</b>	<b>65%</b>
<b>Developing economies</b>	<b>31%</b>	<b>33%</b>
<i>of which:</i>		
Asia	16%	16%
<i>of which:</i>		
China	3%	4%
India	1%	1%
<b>Economies in transition</b>	<b>2%</b>	<b>2%</b>
<i>World exports (\$ billion)</i>	<i>465</i>	<i>673</i>

Source: UNCTAD trade statistics.

35. There has been a high degree of volatility in food prices since 2002, with prices soaring up to mid-2008 and then falling substantially (see figure 7). Between January 2002 and January 2008, food prices rose 102 per cent.

Figure 7. Prices for selected crops



*Note on prices:* Wheat, United States, n° 2 Hard Red Winter (ordinary), FOB Gulf (\$/t);  
 Maize, United States, yellow n° 3, FOB Gulf (\$/t);  
 Rice, Thailand, white milled, 5% broken, nominal price quotes, FOB Bangkok (\$/t);  
 Sugar, average of I.S.A. daily prices, FOB Caribbean ports (¢/lb.);  
 Beef, Australia and New Zealand, frozen boneless, United States import price FOB port of entry (¢/lb.);  
 Bananas, Central America and Ecuador, United States importer's price, FOB United States ports (¢/lb.);  
 Soybean meal, 44/45 per cent protein, Hamburg FOB ex-mill (\$/t);  
 Palm oil, mainly Indonesian, 5 per cent ffa, CIF N.W. European ports (\$/t).

**Table 7. Changes in price of food in the aggregate and for selected crops in %**

	Price changes		
	Jan. 2002– Jan. 2008	Jan. 2008– Apr. 2008	Apr. 2008– Oct. 2008
<b>Agricultural food index</b>	<b>102%</b>	<b>40%</b>	<b>-28%</b>
Wheat	196%	1%	-34%
Maize	133%	14%	-27%
Rice	106%	158%	-39%
Sugar	54%	5%	-5%
Beef	20%	-14%	12%
Bananas	58%	43%	-17%
Soybean meal	144%	19%	-34%
Palm oil	213%	15%	-55%

*Source:* UNCTAD, commodity price statistics.

36. In the following four months (January–April 2008) they rose by 40 per cent, and then decreased 28 per cent in the following six months (April–October 2008).

37. Wheat almost doubled in 2008 compared to 2002, and its price decrease was remarkable, with a loss of 34 per cent in six months (April–October 2008). Rice is one of the most sensitive products related to price – with an increase of 158 per cent in four months and a decrease of almost 40 per cent – although it is not quoted on futures markets.

38. Factors behind price increases include (a) sustained demand in Asia; (b) increasing cost of production, mainly in relation with oil price increase; (c) falling production capacity because of lack of investments; (d) unfair competition from subsidized agriculture; (e) limited production due to bad weather; (f) decreasing stocks from the past

few years; and (g) lately, a contribution of physical speculation (the case of rice) and speculation on futures markets.

39. A price decrease was expected<sup>3</sup> because world production of cereals hit a new record in 2008 and thus global supplies were large enough to answer demand for consumption and replenishment of stocks. However, the price slide was not expected to be so important, and gains in production cannot alone explain this trend.

40. Anticipated big harvests contributed to diminished fears of food shortages on international markets and to relaxed policies on exports. In addition, the financial crisis may have contributed to the steep price decline. Appreciation of the dollar has an automatic effect on a commodity's price decline.

41. The global economic slowdown could jeopardize prosperity in many countries, thus reducing global demand for food, which may have a negative impact on prices. Although price declines should be beneficial for net food-importing countries, the declining purchasing power could increase the risk of a drop in food intake, particularly for the poor, thereby offsetting part or all of the positive impacts of falling prices on consumption.<sup>4</sup>

42. Price increases should benefit agricultural producing countries, specifically producers, since they are able to adapt rapidly their production and most of it is exported. On the other hand, producers in developing countries have not fully benefited from favourable price movements, often because of inadequate structure of the value chain, which prevents price transmission.

43. The recent price increase has had as a consequence a higher cost of living and in some parts of the world may result in social protests due to unaffordable food. Only a few countries are food self-sufficient (such countries produce what they consume), among which almost all developed countries. Possibilities exist to increase productivity in developing countries by increasing yields and expanding land devoted to agriculture. The competition from subsidized agriculture in developed countries has contributed to the reduction of agricultural production, in particular in low-income countries which have become net food importers.

44. Production of crops for energy purposes has to a limited extent impacted on the availability of crops for food, aside from maize and to a lesser extent palm oil and rape seed oil.

45. Except for these three feedstocks, the impact on food security by the production of biofuels is limited.

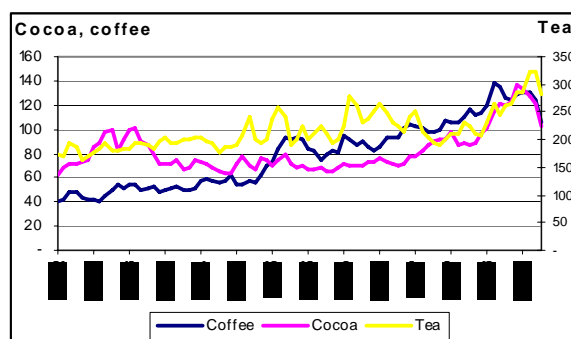
46. The recent developments in tropical beverages markets are noteworthy given the number of low-income developing countries dependent on these crops. Overproduction, especially in coffee from 2000 to 2004, was the main driver behind the lowest-ever recorded price in the so-called coffee crisis period. At that time, Viet Nam expanded its production and became the third-leading exporter of coffee behind Brazil and Colombia, in an already oversupplied market.

---

<sup>3</sup> Food and Agriculture Organization of the United Nations (FAO) (2008). Food Outlook. June.

<sup>4</sup> FAO (2008). Food Outlook. November.

Figure 8 and table 8. Evolution of the price of cocoa, coffee and tea (2002–October 2008)



	Growth rates		
	01.02– 01.08	01.08– 08.08	08.08– 10.08
Price index tropical beverages	116%	16%	-18%
Coffee	199%	8%	-18%
Cocoa	60%	27%	-20%
Tea	33%	40%	-12%

Source: UNCTAD, commodity price statistics.

Note on prices: Coffee, composite indicator price since 1976 (¢/lb.);

Cocoa beans, average daily prices New York/London (¢/lb.);

Tea, Kenya, BPF 1, Mombasa auction prices (¢/kg).

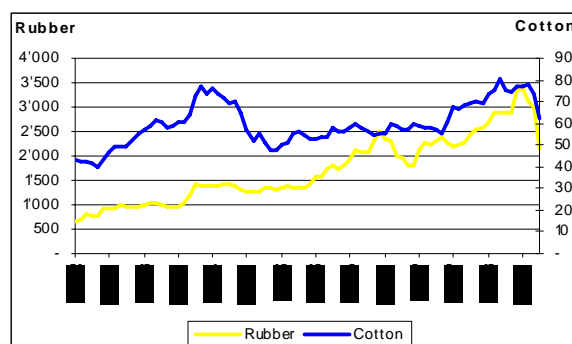
47. Recovery of prices after the 2000–2004 period can be explained mainly by market fundamentals: contraction of production, improvement of quality, development of new consuming markets such as the Russian Federation and Ukraine, and expansion of consumption in producing countries such as Brazil. Coffee prices in August 2008 reached a peak of 199 per cent from their lowest historical level of 2002. The crop year 2007/08 decreased by 9 per cent compared to 2006/07, while consumption is projected to rise by 3 per cent, mainly in producing countries. For example, consumption is forecast to rise by 5 per cent in Brazil, the largest consuming country in terms of consumption per capita.<sup>5</sup> Projections for crop year 2008/09 indicate another contraction of production due to unfavourable climatic conditions, while consumption is expected to continue rising. As a matter of fact, prices for November 2008 increased by 2.25 per cent compared to October.

48. Developments in agricultural raw materials followed the path of crude oil, since synthetic fibres and synthetic rubbers are substitutes to cotton fibres and natural rubber, and their costs of production depend on crude oil prices.

<sup>5</sup> Evolution of the world coffee market, executive director of the International Coffee Organization, 2008.



**Figure 9 and table 9. Evolution of price and price index of vegetable oil and raw materials (in nominal dollars)**



	Growth rates		
	01.02– 01.08	01.08– 06.08	06.08– 10.08
Price index agricultural raw materials	133%	16%	-22%
Cotton	69%	5%	-19%
Rubber	318%	24%	-36%

Source: UNCTAD, commodity price statistics.

Note on prices: Cotton Outlook Index A (M 1-3/32"), CFR Far Eastern quotations (¢/lb.);

Rubber TSR 20, New York (\$/t).

49. Production of cotton is spread over the five continents while rubber is concentrated in Asia, with Thailand, Indonesia, Malaysia, India, China and Viet Nam producing 90 per cent of the total. Over the past decade, cotton production was supported by global economic growth and lowering production costs of textiles owing to a delocalization of the industries in Asia, particularly in China. Cotton trade patterns have thus changed in the last five years, with China becoming the leading importer, followed by Turkey, Indonesia, Thailand, Bangladesh and Pakistan. Producing countries and major exporters remained the same – the United States in the lead, followed by francophone African countries, Uzbekistan, India and Australia.

50. With an average price of \$.758 per pound over the first six months of 2008, the Cotlook A index increased by 69 per cent compared to January 2002 and reached price levels not recorded since 1997. However, cotton prices recorded a fall of 19 per cent between June and October 2008. World production declined by 1 per cent in 2007/08 and is expected to drop by an additional 5 per cent in 2008/09. Prospects are not very clear since the contraction of United States production (down by 26 per cent compared to the previous year) should give more opportunities to other producing countries. A decrease in production is explained by the reduction of the world's cotton-growing area, due to increased competition from other crops, in particular maize and soybean. In addition, the cotton price for farmers could rise due to the depreciation of dollar currencies compared to the CFA franc in Africa, and thus sustain production in these countries. At the same time, world use decreased by 1 per cent, and forecasts shows a further decline, mainly driven by the global economic slowdown.

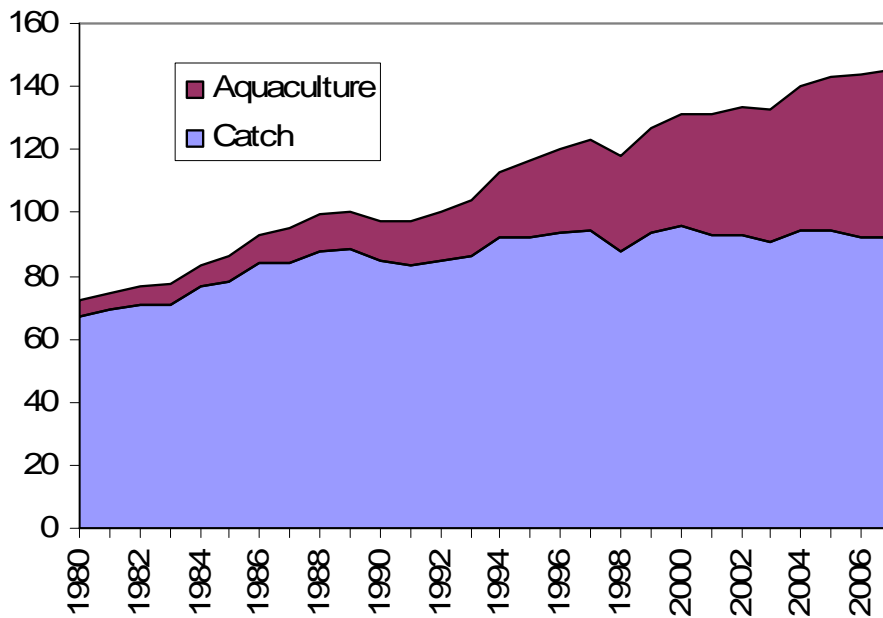
51. Developments of natural rubber production are mainly driven by industrial demand, in particular the automotive sector. Driven by its increasing demand and stagnating production, China became the leading importer in 2003, overtaking the United States and the European Union (EU). Since then, production and trade of natural rubber has increased at an annual growth rate between 3 and 6 per cent. With the global economic slowdown, in particular in the automotive sector, consumption prospects for 2009/10 are pessimistic.

52. Prices reflect these developments. The price of natural rubber rose by 318 per cent from January 2002 to June 2008, mainly influenced by rising petroleum prices and, therefore, a less interesting substitution by synthetic rubber, and by a growing demand from Asia. However, prices have tended to decline since June, with a drop of 36 per cent by October 2008, anticipating the economic slowdown and opening opportunities for substitution by synthetic rubber, while crude oil prices have declined to levels not reached in the last five years.

**B. Fishery**

53. After experiencing continuous growth since the 1950s, world fishery capture has stagnated since the mid-1990s at around 90 million–95 million tons per year (see figure 10) due to many species being fully exploited, overexploited, depleted or recovering. At the same time, aquaculture production has steadily grown in response to demand growth, reaching 53.2 million tons in 2008, equivalent to 58 percent of marine fish capture (see table 10).

**Figure 10. World fish production (millions of tons)**



Source: FAO, FISHSTAT.

**Table 10. World fish production and utilization in million tons**

	2006	2007	2008 (estimate)
<b>Production</b>	<b>138</b>	<b>142.6</b>	<b>144.2</b>
Capture	89.6	91.8	91.0
Aquaculture	48.4	50.8	53.2
Trade volume	53.5	55.0	54.5
<i>Trade value (exports \$ billion)</i>	78.4	85.9	92.7
<b>Total utilization</b>			
Food	110.4	112.3	114.5
Feed	20.9	20.8	20.0

Source: FAO. Food Outlook. November 2008.

54. Global demand for fish is strong, particularly in developed countries, where fish consumption is associated with a healthy diet. As table 11 indicates, developed countries account for around 80 per cent of global fish imports. In the last decade, both the EU and United States have increased their shares of global fish imports, while Japan's share has declined by nearly half. In 2007, the United States overtook Japan as the second-largest importer, and together the three accounted for around 70 per cent of world exports.

**Table 11. Share in world exports and imports of fish and fishery products, by major groups of countries, 1995–1997 and 2004–2006 (%)**

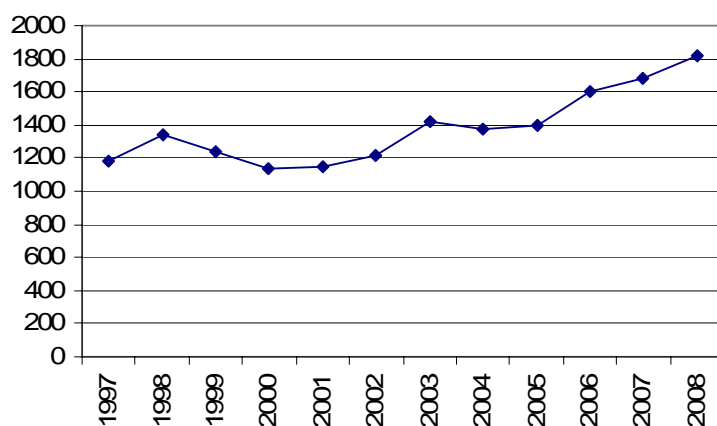
<b>Exports</b>	<b>1995-1997</b>	<b>2004-2006</b>
<b>Developed economies</b>	<b>48%</b>	<b>49%</b>
of which:		
Japan	2%	11%
EU	21%	24%
United States	6%	6%
<b>Developing economies</b>	<b>51%</b>	<b>50%</b>
of which:		
Asia	34%	34%
of which:		
China	6%	11%
<b>Economies in transition</b>	<b>1%</b>	<b>1%</b>
<i>World imports (\$ billion)</i>	48	73
<b>Imports</b>	<b>1995-1997</b>	<b>2004-2006</b>
<b>Developed economies</b>	<b>84%</b>	<b>79%</b>
of which:		
Japan	31%	18%
EU	35%	40%
United States	14%	16%
<b>Developing economies</b>	<b>15%</b>	<b>19%</b>
of which:		
Asia	12%	14%
of which:		
China	1%	4%
<b>Economies in transition</b>	<b>1%</b>	<b>2%</b>
<i>World imports (\$ billion)</i>	53	78

Source: UNCTAD trade statistics.

55. The share of developing countries in global fishery exports increased from around 40 per cent in 1980 to 51 per cent in 1995–1997, before declining to around 50 per cent in 2004–2006. Asian countries accounted for most of this growth, particularly China, but also Thailand and Viet Nam. The fishery net exports of developing countries have shown a continuing rising trend in recent decades, growing from \$16.0 billion in 1994 to \$24.9 billion in 2006. These figures are significantly higher than those for other agricultural commodities.

56. Prices of fishery products followed the general upward trend that was experienced by major food commodities in the course of 2007 and early 2008 (see figure 11) and this period was the first time in decades that real prices of fish rose. Prices of species from capture fisheries increased faster than prices of farmed species, because of the higher costs associated with higher fuel prices on fishing vessel operations than on farmed species. However, aquaculture also faced higher costs, in particular of feed. World shrimp trade declined somewhat in 2007, reflecting smaller imports by Japan and the United States due to weakening consumer demand for high-value species mainly used in the restaurant sector. Since mid-2008, prices of all fish and fish products have generally come under downward pressure due to falling consumer demand reflecting the financial and economic crisis that is hurting seafood sales in all markets.

**Figure 11. World export unit value of fishery products (\$/ton)**



Source: FAO, FISHSTAT.

### C. Forestry

57. Forestry products consist of wood products originating from temperate zones and tropical timber. In 2006, the share of tropical origins in the value of global imports of primary processed wood products (i.e. logs, sawn wood, veneer and plywood) amounted to 27 per cent for logs, 13 per cent for sawn wood, 20 per cent for veneer and 38 per cent for plywood. Table 13 shows the share of major groups of countries in global trade in primary processed wood. The share of developing countries in exports has decreased, reflecting the fact that, since the beginning of the 1990s, developing countries have increasingly shifted to the industrial processing before export of wood into secondary processed wood products (SPWPs) – furniture and parts, builder’s woodwork and moulding – of much higher value.

**Table 13. Share in world exports and imports of primary processed wood products, by major groups of countries, 1995-97 and 2004-2006 (in per cent)**

<b>Exports</b>	<b>1995-1997</b>	<b>2004-2006</b>
<b>Developed economies</b>	<b>66%</b>	<b>66%</b>
of which:		
EU	<b>35%</b>	<b>41%</b>
<b>Developing economies</b>	<b>30%</b>	<b>27%</b>
of which:		
Asia	<b>22%</b>	<b>18%</b>
Of which:		
China	<b>2%</b>	<b>7%</b>
<b>Economies in transition</b>	<b>4%</b>	<b>7%</b>
of which:		
Russian Federation	3%	6%
<i>World imports (\$ billion)</i>	<i>66</i>	<i>100</i>
<b>Imports</b>	<b>1995-1997</b>	<b>2004-2006</b>
<b>Developed economies</b>	<b>79%</b>	<b>78%</b>
of which:		
Japan	<b>19%</b>	<b>9%</b>
EU	<b>37%</b>	<b>39%</b>
<b>Developing economies</b>	<b>20%</b>	<b>20%</b>
of which:		
Asia	<b>16%</b>	<b>15%</b>
of which:		
China	<b>2%</b>	<b>5%</b>
<b>Economies in transition</b>	<b>1%</b>	<b>2%</b>
<i>World imports (\$ billion)</i>	<i>71</i>	<i>105</i>

Source: UNCTAD trade statistics.

58. As a consequence, trade of logs has fallen dramatically, from over 60 per cent in the 1980s to 22 per cent in 2007. Only Africa continues to export a significant volume of tropical logs compared to primary processed products, with log exports making up 45 per cent of Africa's total export volume in 2007. In Asia-Pacific region, log exports made up just over a fifth of Asia's total primary product export volume in 2007.

59. China's imports continue to drive the log market, despite a continued decline since 2004. Imports come from developing country production, and from the Russian Federation (non-tropical wood). Many of China's log imports are converted to plywood, with the country now the world's second-largest producer and third-largest exporter.

60. The value of world imports of secondary processed wood products rose from \$49.5 billion in 2002 to \$80.1 billion in 2006. Producers of tropical timber accounted for 15 per cent of imports. Many producing countries continued to shift from primary to secondary processed wood products in 2007, with trade in these products continuing to rise, while trade in primary processed tropical timber products declined (table 14).

**Table 14. Exports of primary and secondary processed tropical wood from tropical timber producers (value in \$ million)**

	<b>1995</b>	<b>2000</b>	<b>2006</b>
Primary processed wood	12,180	8,350	8,930
Secondary processed wood products	4,020	7,820	11,180

Source: International Tropical Timber Organization statistics.

61. The United States is the largest single importer of SPWPs, accounting for 31 per cent of world imports in 2006. Its imports increased about four-fold in the last decade, propelled by a strong housing market and related demand for interior wood products. China dominates the SPWPs export trade in both tropical and non-tropical wood origins.

62. The prices of most primary tropical timber products and species have been on an upward trend following the recovery from the slump due to the 1997–1998 Asian financial crisis. Export prices for secondary processed wood products have generally been more stable than prices for primary products, and they were stable or declining until mid-2004. Since then, all tropical wood products were on the rise until they began to fall in the second half of 2008 under the adverse impacts of the United States economic slowdown and the global financial crisis. Other recent developments – such as the EU scheme to restrict imports of timber to those legally sourced from volunteer partners under its “Forest Law Enforcement, Governance and Trade” initiative – will likely affect demand for tropical timber in the near future.

#### **IV. Development implications of recent commodity trends**

63. Rising and falling commodity prices pose two different sets of issues for developing countries. The recent commodity boom has contributed to significant improvements in the external accounts of many developing countries dependent on primary commodities, with large terms of trade gains for oil- and mineral-exporting countries. It has generated vast public financial resources in many countries, making possible public investments in social and economic infrastructure on a scale unseen before, far outstripping official development assistance. Thus, it has revived the potential role of commodity trade in contributing to the developing world’s economic growth, poverty reduction and development.

64. The boom also raised a number of commodity policy issues. These included (a) the distribution of gains from higher prices between foreign investors and host countries in the extractive industries; (b) good economic governance and control of corruption in the management of windfall revenues; (c) the preservation of a competitive environment in commodity supply chains in view of increased merger and acquisitions among companies in the extractive industries; (d) energy and food security, especially for low- and middle-income developing countries dependent on imported energy supplies, and low-income food deficit countries with negative terms of trade effects from rising fuel and food prices.

65. Table 12 presents an estimate of the impact of changes in the terms of trade of developing countries by export structure. Between 2004 and 2007, income gains from changes in the terms of trade were high for oil- and mineral-exporting countries, amounting to 7.5 and 3.9 per cent of GDP, while on average exporters of other commodities showed losses. However, in some cases, the windfall gains have been partly offset by increased profit remittances by transnational corporations involved in the exploitation of natural resources. This has been the case particularly for oil- and mineral-exporting countries in Africa, Latin America and economies in transition, where foreign companies account for a large proportion of their export-oriented production (especially in mining) and where the taxation system is favourable to private firms in the extractive industries.<sup>6</sup>

---

<sup>6</sup> See UNCTAD (2006). *Trade and Development Report*; and UNCTAD (2007). *World Investment Report*.

**Table 12. Impact of changes in terms of trade and net income payments on national disposal income in selected developing country groups: average for 2004–2007 (% of GDP)**

	<i>Effects from changes in terms of trade</i>	<i>Effects from changes in net income payments</i>	<i>Net impact</i>
Oil exporters	7.5	-2.0	5.5
Exporters of minerals and mining products	3.9	-2.1	1.8
Other commodity exporters	-0.2	-0.1	-0.4

*Sources:* UNCTAD secretariat calculations, based on United Nations Statistics Division, United Nations common database; International Monetary Fund, balance of payments statistics database; Economic Commission for Latin America and the Caribbean, balance of payments statistics database; national sources; and UNCTAD estimates of unit value and volume of exports and imports.

66. The record is mixed for agricultural product exporters. While some middle-income more diversified developing countries have seen their terms of trade improve over the past few years, some of those exporting tropical agricultural products have seen the prices of their exports outpaced by those of their imports (e.g. fuels and food), and thus are experiencing significant deterioration of their terms of trade. For example, in many low-income countries, the cost of petroleum imports rose to unprecedented proportions of their total imports while the low-income net food-importing countries have seen their food import bills nearly triple.

67. While a reversal of the upward trend in energy and food prices will bring some relief to low- and middle-income developing countries dependent on imports of fuel and food, a generalized fall in commodity prices which also affects their export commodities will have a negative impact on their economies and the livelihood of small farmers.

68. Falling commodity prices will reduce the revenues of Governments and the incomes of farmers, and will slow down or cut back investments in social services and productivity-raising infrastructure and activities. This could return a large number of developing countries to the low-income commodity dependency trap of stagnant economic growth and deteriorating social and poverty indicators.

#### **IV. Conclusion**

69. As history shows, periods of high and low price fluctuations are typical occurrences in commodity markets, whatever the long-term trend, upwards or downwards. The recent commodity boom was driven by buoyant global economic growth underpinned in good part by the strong economic and industrial growth of developing countries. If the global recession is mild and short-lived, it can reasonably be expected that the growth and industrialization process in developing countries will quickly resume. In this context, it is important to examine options for coping with the adverse effects of the “bust” phases in commodity cycles. Experts may wish to examine further the salient developments in key commodity sectors and markets from the development perspective, and appraise the extent of the opportunities and challenges arising from the current situation and outlook in commodity markets.