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# World commodity trends and prospects

## Note by the Secretary-General

The Secretary-General has the honour to transmit, to the General Assembly, as requested by the Assembly in its resolution 63/207 of 19 December 2008, the present report on world commodity trends and prospects prepared by the secretariat of the United Nations Conference on Trade and Development.

\* A/64/150.





## World commodity trends and prospects

## **Report prepared by the secretariat of the United Nations Conference on Trade and Development**

#### Summary

Since mid-2008, when the previous report on world commodity trends and prospects (A/63/267) was prepared, commodity markets have witnessed some of the most dramatic episodes in the history of commodity price booms and busts. Reaching their historical peak by the middle of 2008 in nominal, and in some cases real terms, commodity prices then started a dramatic downward spiral triggered by the global economic and financial crisis, reaching their trough at the beginning of 2009. Since then, the prices have started to recover. Currently the global commodity community is trying to discern what might be the future dynamics of prices and to assess the implications of the severe commodity price swings for trade and finance and the situation of producers, users and other stakeholders of the commodity economy.

In the search for answers, it is important to consider the causes of the recent commodity price boom and bust and the forces underlying recent developments in commodity markets. One key issue is the role of market fundamentals and non-fundamental factors in determining the dynamics of commodity prices. After analysing the relative weights of market fundamentals, such as the interplay of demand/supply, and speculation as key factors of price formation, the report comes to the conclusion that there is a need to apply an appropriate combination of regulatory and market instruments to achieve more stability in commodity markets.

The effects of the current economic crisis on the commodity economy include a decline in the demand for commodities, shrinking commodity finance and the cancellation of investments, leading in turn to an economic slowdown in commodity-dependent economies. It is thus essential that the collective response to the current crisis includes policies that address longer-term structural issues of the commodity economy and integrate commodity policies into wider development and poverty reduction strategies. The international community, including the United Nations Conference on Trade and Development (UNCTAD), can actively contribute to that end by making renewed efforts to build consensus, in particular at the intergovernmental level. To reinforce such a process, UNCTAD is initiating a series of multi-stakeholder commodity forums and high-level consultations, thereby laying the ground for more consensual approaches by all parties concerned.

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## I. Introduction

1. The present report has been prepared in response to paragraph 4 of General Assembly resolution 63/207, by which the Assembly requested the Secretary-General to submit to it at its sixty-fourth session a report on commodities.

2. Since mid-2008, when the last note on this subject was prepared, the commodity markets have seen some of the most dramatic ups and downs in their history. Reaching their historical peaks in the middle of 2008 in nominal terms, and in real terms in the case of minerals, metals and crude oil, commodity prices started their precipitous downward spiral triggered by the global economic crisis and reached their trough at the beginning of 2009.<sup>1</sup> Since then prices have started to recover.

3. The present report attempts to provide answers to the question of what are the driving forces shaping the future dynamics of commodity markets and, in particular, prices. In doing so, it considers the causes of the commodity price boom and bust, which can help in understanding the timing and extent of an anticipated upturn. Section II analyses the latest cycle and reviews the developments for the main commodity groups. Section III looks at the dynamic relationships between fundamental and non-fundamental factors determining the prices of commodities. Section IV assesses the implications of recent developments for the functioning of commodity trade and finance. Section V analyses the implications of the crisis for commodity exporting and importing countries. Section VI concludes and sketches some ideas about the need for, scope and thrust of support measures by the international community, including the United Nations Conference on Trade and Development (UNCTAD), to address the commodities issue in the current crisis context.

# **II.** Recent developments in the commodity markets: the boom and the downturn

4. During the current decade the world commodity markets have undergone profound changes. Virtually all of them have experienced a long phase of price increases with some, especially crude oil, going through one of the longest and steepest price booms ever. However, the long price boom between 2002 and 2008 was abruptly aborted in the second half of 2008 by the outbreak of the global economic crisis, which was triggered by the collapse of a model of financial intermediation that relied on the disproportionate use of debt securitization and risk transfer schemes based on derivatives and poor risk evaluation techniques. The steep decline of commodity prices during the second half of 2008 wiped out most of the terms-of-trade gains achieved by commodity exporters during the boom period.

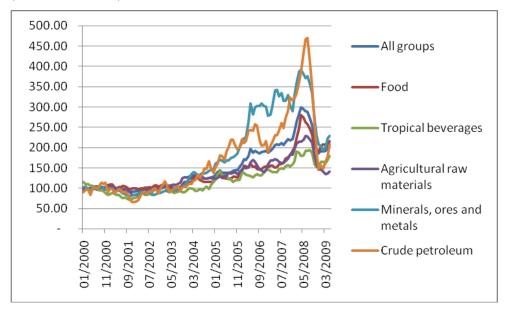
5. In the first half of 2009 commodity prices stabilized, then started slowly to recover (see annex I to the present report). The recent trend of commodity prices, with many prices at the level of the middle of last boom, raises questions as to

<sup>&</sup>lt;sup>1</sup> In the case of other mainly agricultural goods, the real price indices have not attained the levels reached in the 1970s. As a result the all-commodity price index (crude oil excluded) also did not reach the level of the 1970s. For further details, see the previous report on world commodity trends and prospects (A/63/267).

whether the recovery is already under way and how sustainable it might be. The longer-term related question is whether prices will eventually return to or even surpass the levels reached before the crisis.

6. Figure 1 shows the developments in prices for the main commodity groups since the year 2000. The prices of commodities started rising in 2002, with growth rates attaining their peak, then falling precipitously, during 2008. That long boom and abrupt bust has been followed by a partial recovery of prices during the first months of 2009. It appears that the fall has been arrested and prices have temporarily stabilized.

### Figure 1 Price indices of main commodity groups, January 2000-March 2009 (2000=100)



(In United States dollars)

Source: UNCTAD Commodity Price Bulletin.

7. One feature that stands out is that in spite of spikes during relatively short periods of time, the rise in prices from 2002 to 2007 was relatively gradual, while the rise in the first half of 2008 and the subsequent fall in the second half of the same year was abrupt.

8. The oil boom continued into the first half of 2008 despite clear signals of the credit crunch in the United States of America, such as the emerging difficulties of the investment banks. The price of crude oil went up to more than \$140 per barrel after the announcement by the Chairman of the United States Federal Reserve Board that the worst was over and the United States economy would resume its growth from the second half of 2008.<sup>2</sup> In the meantime, the International Monetary Fund (IMF) also upgraded its projections of global growth in the spring of 2008. The final episode of spectacular oil price hikes in the middle of 2008 was based on misguided

<sup>&</sup>lt;sup>2</sup> www.federalreserve.gov/newsevents/testimony/bernanke20080402a.htm.

expectations that the United States economy would overcome the temporary difficulties and the world economy would preserve its growth dynamics. When the systemic crisis unfolded (coinciding with the collapse or near collapse of the leading United States banks and insurance companies), it quickly led to a general recession and depression and commodity prices started to decline dramatically.

9. Gradual increases in prices are typical for commodity booms caused by incremental increases in demand, rather than supply-side shocks. This reflects the need to offer higher prices in order to induce further supply onto the market, whether from marginal operators with higher costs or from sources further from the market. Growth in demand was strong for all commodities during the past decade and capacity utilization rose steadily while new production facilities entered into operation. The main factor behind the increase in demand was the rapid growth and industrialization in developing countries, particularly China. Most of the demand growth for several commodities could be traced directly to the increasing needs of the Chinese economy.

10. This strong growth of demand in Asia has also entailed a reorientation in the geography of international commodities towards South-South trade. Developing countries became more important global players not only as the origin, but also the destination of international trade in commodities. The main driving force was, and still is, China. As annex II to the present report shows, between 1996 and 2006, China increased its share of global commodity imports from 2 to 6 per cent, while India increased its share at a lower rate. Though developing countries still account for less than half of total commodity trade (less than half of world imports), their importance in commodity markets has increased dramatically over the past decade.

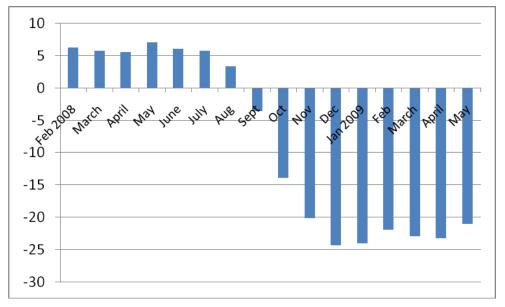
11. As demand continued growing, supply constraints caused by decades of underinvestment became more significant leading to very low spare capacities in some commodities. As prices rose and buyers tried to cover their needs and replenish depleted stocks, some Governments intervened to reserve supplies for their own population. Hence, prices rose even further, until demand fell. In the case of some commodities, demand continued to rise until the financial crisis erupted in September 2008.

12. While the fall in commodity prices was certainly much steeper than it would have been if the financial crisis had not happened, it would be an exaggeration to state that one of the major causes of the crisis was the burden of high commodity prices, although rising commodity prices contributed to inflation. In fact, the prices of many commodities had begun to decline before the crisis unfolded.

13. The depth and steepness of the downturn is perhaps best illustrated by developments in the steel sector, which is made up principally of iron ore and other metals used as inputs in business cycle-sensitive industries such as construction, vehicles, machinery and equipment. In that sense, it is also one of the most important industrial raw materials and can thus be seen as representative of commodities in general.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> Although steel is not a commodity per se the situation in steel markets reflects developments in base metals markets. Moreover, data on steel are among the most readily available and reliable.

### Figure 2 Year-on-year percentage change in world monthly crude steel production



Source: World Steel Association, www.worldsteel.org.

14. Figure 2 shows the year-on-year change in monthly world crude steel production from February 2008 to May 2009. Production declined over a fourmonth period starting in September 2008, remaining at levels 20 to 25 per cent lower than the previous year. Having reached its lowest level in December 2008, production began increasing again. It appears that for steel at least, the turning point may have been reached.<sup>4</sup>

15. Such deep downturns in production have been experienced by most commodities used in industrial production. Food commodities have been unaffected in volume, since it is easier to reduce the use of manufactures than food consumption in times of economic hardship.

16. According to figures from the International Lead and Zinc Study Group, world usage of both lead and zinc has been on an increasing trend since the beginning of 2009.<sup>5</sup> For most agricultural commodities, production cannot be easily adjusted on a monthly basis. The International Grains Council estimates that production, consumption and trade in grains all increased in the 2008/09 crop year (July 2008-June 2009). For the crop year 2009/10, production and trade are predicted to fall, while consumption of wheat is expected to remain constant and that of maize to increase slightly.<sup>6</sup>

17. The upturn may be influenced by the large Chinese anti-crisis fiscal stimulus package (more than a half a trillion dollars), directed mainly to financing infrastructure. Similar packages introduced by other countries, while important, were smaller. The direct effect on commodity demand is expected to be much less

<sup>&</sup>lt;sup>4</sup> World steel short-range outlook, 27 April 2009, www.worldsteel.org.

<sup>&</sup>lt;sup>5</sup> International Lead and Zinc Study Group, press release, 17 June 2009, www.ilzsg.org.

<sup>&</sup>lt;sup>6</sup> Grain Market Report No. 390, 25 June 2009, www.igc.org.uk.

important in developed economies, where a much smaller share of gross domestic product goes to commodities use. While in other economies the distressed banking sector has been blocking credit expansion, and thus the transmission of monetary easing, Chinese banks reacted to such easing by providing credit to the real economy aggressively.

18. A "real" upturn will only materialize once international trade, and therefore Chinese exports, recover. The Chinese economy is less export-dependent than is often believed. Domestic demand, which has held up well since the financial crisis, may provide sufficient fuel for at least a modest recovery of global commodity demand. At this stage the growth in usage of commodities has slowed as a result of major efficiency measures introduced in energy and other minerals use and policy considerations related to climate change. The same would apply to many other countries of Asia and Latin America, while most African countries have not yet reached the income levels where commodities, except for food staples, become an important part of their expenditure.

19. The drivers of commodity demand emanating from China and other developing economies have not changed dramatically. However, reduced access to credit and uncertainties related to future global demand could still postpone the return of developing economies to previous rates of economic growth, thus moderating their demand for commodities. Other factors such as longer than anticipated stagnation in developed countries, policies to address climate change and related energy conservation and restructuring measures may also play a role in dampening commodity demand.

20. In order to place the recent boom and bust cycle in perspective, it is useful to compare it to previous similar events, namely the 1973/74 and 1979/80 commodity price booms and the subsequent decline in oil and other commodity prices in the 1980s and 1990s. While there are both similarities and differences between the two episodes, the main question is whether the world economy will again face a long period of lower commodity prices owing to the confluence of new supply capacities, lower growth, more material and energy conservation, technological innovations and the use of alternative sources of energy and industrial materials.

21. One of the most important differences between the current and previous cycles is the role played by developing countries as a source of demand. While the developed economies are less commodity-intensive than they were in the 1970s, commodities use has been crucial to the fastest-growing part of the world economy, namely emerging economies led by China. Another difference is the current limited availability of traditional low-cost oil fields and the need to explore higher-cost sources of liquid fuels. The theory of "peak oil" is also a factor that could affect markets sentiments.

22. The factors that drove commodity price increases in the early years of the current decade will continue to operate for the medium to long term. The increase in per capita incomes in China resulted in double-digit growth rates of imports of food products such as fish, vegetables and fruits and coffee and cocoa. Even if Chinese growth slows down or becomes more inward-oriented and less dependent on exports, rising disposable incomes will ensure that demand for commodities continues growing. China is still far from achieving the standard of living that is associated with a slowdown in the rate of growth of commodities demand. Together

with India, the other main emerging economy, China continues to represent the bulk of the increase in future global commodity demand.

23. Finally, the probability of rising commodity prices in the medium to long term could be strengthened by supply-side constraints. In energy and mineral commodities, had the boom continued, the stimulus of higher prices would have been sufficient to call forth a large increase of investment. However, the crisis led to the cancellation or postponement of many new projects in the pipeline. Prices and demand conditions in 2009-2010 are not likely to allow the relaunching of many projects. When demand returns to pre-crisis levels and continues growing, there is a significant risk that capacity ceilings will be reached and new price spikes could appear.

24. Concerning agriculture, while total acreages have increased, most of the growth has taken place in developed countries and much-needed productivity increases in developing countries have yet to materialize. If the nutrition needs of the world's population are to be met, increasing the area under cultivation and productivity gains in developing countries should become the main drivers of increase in food production.

25. The question may not be if new price spikes for commodities will occur, but when, and what to do to smooth price fluctuations through better coordination between commodity producers and users in terms of more accurate assessment of future demand and adequate investment and other measures from the supply side.

### **Developments for commodity groups**

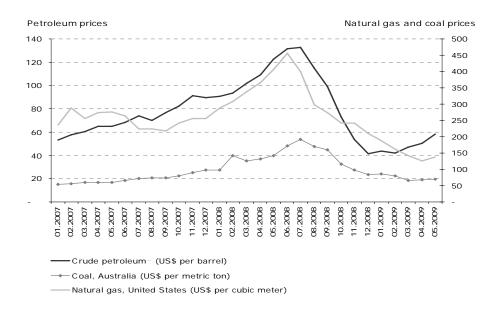
#### Energy

26. After increasing from around \$70 per barrel in January 2008 to nearly \$150 in July 2008, the price of oil declined once the recession got under way, falling to less than \$40 by the end of the year. In early 2009, however, oil prices began to recover (see figure 3 below). In June they were briefly higher than \$70 per barrel. According to the International Energy Agency, prices were driven by the perceived global economic recovery and by higher refinery output. Both production and use were running at rates slightly lower than in 2008, and oil demand in 2009 was projected to decline by 2.9 per cent relative to 2008.<sup>7</sup> While the Organization of the Petroleum Exporting Countries (OPEC) tries to regulate its output, allowing for only a slight increase, non-OPEC production is falling and stocks are somewhat higher than in 2008. The United States Energy Information Administration expects that the average price for West Texas Intermediate crude in the second half of 2009 will be around \$70 per barrel, a 35 per cent increase over the average price for the first six months of the year, while an average price of \$72 is forecast for 2010.8 In July, natural gas prices were closely following oil prices. Coal demand was also showing signs of strength. For example, spot prices for Australian thermal coal were rising from March 2009.9

<sup>&</sup>lt;sup>7</sup> Oil market report, 11 June 2009, www.oilmarketreport.org.

<sup>&</sup>lt;sup>8</sup> See www.eia.doe.gov/steo.

<sup>9</sup> The Tex Report, Tokyo, 7 July 2009.



### Figure 3 Monthly average prices of crude oil, natural gas and coal, January 2007-May 2009

Source: UNCTAD Commodity Price Bulletin.

#### **Minerals and metals**

27. Demand for mineral commodities fell drastically with the general downturn. At that point, however, most metals had already passed their price peak. In some cases the peak had been reached much earlier, as in the case of nickel, which peaked in May 2007. As can be seen in figure 4, price developments for the main non-ferrous metals differed significantly during the upturn. This was mainly due to differences in the responsiveness of supply. The supply response was relatively quick for metals such as zinc, which are mainly extracted from medium-size mines where output can often be ramped up quickly and where infrastructure bottlenecks are less of a constraint. It is also clear from figure 4 that prices recovered somewhat in early 2009, mainly owing to a pickup in Chinese demand and, in some cases, an end to destocking.

28. Prices for *aluminium* increased less than those of other metals in the upturn, mainly because of persistent excess capacity, which has become a concern as demand in most of the world has fallen owing to the recession. Production in the first five months of 2009 by International Aluminium Institute members, who account for about 80 per cent of world production, was about 7 per cent lower than the same period in 2008.<sup>10</sup>

29. *Copper* usage decreased by 4 per cent in the first quarter of 2009 compared to the same period in 2008, according to the International Copper Study Group.<sup>11</sup> China's apparent usage grew by 36 per cent, partially offsetting a decrease of 19 per

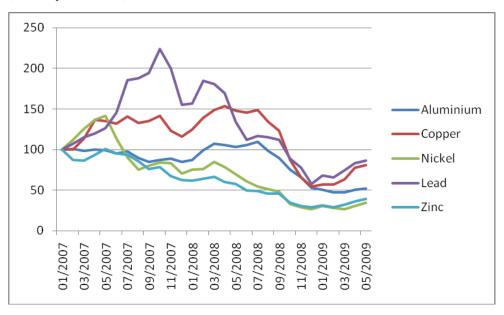
<sup>&</sup>lt;sup>10</sup> See www.world-aluminium.org.

<sup>&</sup>lt;sup>11</sup> Press release, 22 June 2009.

cent in the rest of the world. A slight surplus of production over usage is projected for 2009, in spite of production cutbacks. Capacity utilization in mines is at 77 per cent and in refineries at 75 per cent, compared to averages of 87 per cent and 85 per cent respectively over the past five years.

## Figure 4

Price indices of major non-ferrous metals, monthly averages, January 2007-May 2009 (January 2007=100)



Source: UNCTAD Commodity Price Bulletin.

30. According to the International Lead and Zinc Study Group, *lead* usage during the first four months of 2009 was the same as in 2008, while that of *zinc* was 11.7 per cent lower. Usage of both metals is increasing, mainly due to Chinese demand, and prices which peaked early in the cycle for both metals have risen somewhat in early 2009.<sup>12</sup>

31. World primary *nickel* usage in 2008 started strongly but as the global economic crisis unfolded, demand and production of stainless steel, which is the most important use of nickel, declined from the middle of the year. No recovery in stainless steel production, and primary nickel demand, is anticipated until at least the second half of 2009. World primary refined nickel production declined in 2008 and a further decline is expected in 2009. According to the International Nickel Study Group, the usage also declined in 2008 and is expected to fall by a further 7.5 per cent in 2009.<sup>13</sup>

32. World *iron ore* production, which grew by 3.6 per cent in 2008, is expected to fall dramatically in 2009, as steel production is projected to decline by as much as 15 per cent. Prices in long-term contracts declined by 26 per cent to 33 per cent for the most important product type, but spot prices have improved from low levels at

<sup>&</sup>lt;sup>12</sup> Press release, 17 June 2009.

<sup>&</sup>lt;sup>13</sup> Press release, 24 April 2009.

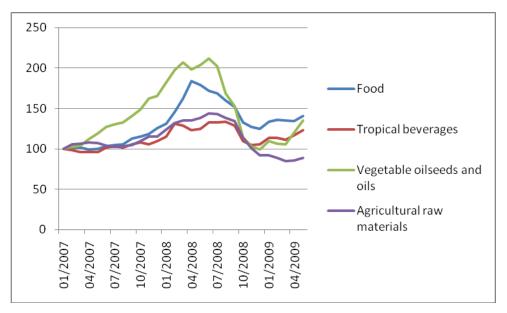
the end of 2008 owing to strongly increasing Chinese demand. Current prices are not sufficient to cover costs of all producers. Since large additions to capacity are also under way, significant structural changes can be expected over the next several years.<sup>14</sup>

### Agriculture and forestry

33. As shown in figure 5, prices of food and of vegetable oils and oilseeds followed very similar paths. The growing demand for food affected both groups, partly because of rising direct demand for food and animal feed, and partly because they are often grown on the same type of land. Although the extent of the actual impact is debated, the rapidly rising demand for biofuels is also likely to have affected both grains, since maize and wheat are used for ethanol production, and vegetable oils such as palm oil and rapeseed, which are used for biodiesel. Agricultural raw materials and tropical beverages appear to have been much less influenced by the general upturn and also less touched by the downturn.

#### Figure 5

### Price indices of groups of agricultural commodities, monthly averages, January 2007-April 2009 (January 2007=100)



Source: UNCTAD Commodity Price Bulletin.

34. Within the food group, there are clear differences between staples and feeds, including grains and fishmeal, and higher-priced goods for direct human consumption such as meat and tropical beverages. While prices of products in the first group showed clear spikes in 2007-2008, prices of those in the second group only rose moderately. This illustrates that to a considerable extent, the food crisis is driven not only by direct demand for basic foodstuffs, but by demand for feed.

<sup>14</sup> The Iron Ore Market 2008-2010, UNCTAD, June 2009.

Rising levels of income have had the effect of enabling the poorest to buy staples such as rice, while allowing those slightly better off to eat meat once in a while.

35. With grains, the 2008/09 harvest was good for both *maize* and *wheat*. However, consumption also increased rapidly, and prices that had been declining from early to mid-2008 reached new peaks in June 2009. The fact that oil prices rose gradually during most of the first half of 2009 contributed to spurring new interest in ethanol, which raised demand for maize. The forecast for the 2009/10 harvest is good; grain stocks are expected to change only marginally. The price of *rice* has declined substantially from the very high level reached in April 2008 and has held steady for most of 2009.

36. *Sugar* prices peaked early in 2006 and were then untouched by the commodity boom. The rapid supply response for sugar means that production has kept up with demand growth, both for human consumption and for the production of ethanol.

37. *Vegetable oils and oilseeds* were caught up in the market turmoil of the commodity boom. Since the various oils are all close substitutes for one another, prices evolved in parallel, peaking for the most part in mid-2008. Prices have since declined considerably, although they are still high at more than double the prices in 2000.

38. Prices of *cocoa* and *coffee* were mildly affected by the general surge in commodity prices, although prices of both products reached peaks in early 2008. According to the International Coffee Organization (www.ico.org), exports in the first eight months of coffee year 2008/09 (October 2008 to May 2009) increased by 3 per cent compared to the same period the previous coffee year. Prices fell slightly in June 2009, which is interpreted as the market having ruled out the possibility of a frost in Brazil. Cocoa production is expected to fall slightly in the harvest year 2008/09, while prices are still at a relatively high level.

39. Regarding agricultural raw materials, prices of rubber and cotton were those most affected by the economic upturn and subsequent crisis. *Rubber* prices, which peaked in mid-2008, have since fallen by almost two thirds. Demand has been hard hit by the decline of the transportation industry. According to the International Rubber Study Group, global rubber consumption declined by 9.4 per cent in the year to March 2009, to its lowest level since April 2006.<sup>15</sup> Demand for both natural and synthetic rubber is forecast to decline in 2009. The subsequent recovery will be slower for synthetic rubber than for natural rubber. In 2009/10, world *cotton* production is expected to continue to decline for the third consecutive season. The outlook for prices, which declined by about 30 per cent from mid-2008 to mid-2009, is uncertain, with expected increasing demand in China being possibly offset by a negative outlook in other markets.

40. *Wood* products, finally, were little affected by the recent economic expansion but have suffered from the economic downturn, as activity in the construction sector worldwide has declined and worse times for print media have reduced the demand for paper pulp. Prices of both non-coniferous wood and tropical logs fell by about 30 per cent from mid-2008 to mid-2009.

<sup>&</sup>lt;sup>15</sup> See www.rubberstudy.com.

# **III.** The volatility of commodity markets and prices: interplay of market fundamentals and non-fundamental factors

41. The major fluctuation of commodity prices in 2008 is heating the long-running and unresolved debate about the instability of commodity markets and ways of mitigating it. The current crux of the debate is whether the recent commodity price hikes and falls reflect the interplay of market fundamentals or are the consequence of speculation. The proponents of the prevailing role of market fundamentals view price instability as a mismatch between short- or medium-term inelastic commodity supply and demand forces.<sup>16</sup> The combination of inelastic demand and supply means that fairly small shifts in the parameters of the world market tend to have large repercussions on market prices. Such shifts may originate on the demand side — for instance, through several years of steady demand growth — or on the supply side, for example, as a result of failed harvests. However, shifts in market parameters do not invariably lead to price spikes. The reason is that stocks are usually large enough to serve as buffers and limit the extent of the price movement until supply and demand have had time to adjust.

42. Those stressing the role of speculation, especially in 2008, while agreeing with the key role of fundamentals, still argue that the emerging phenomenon of moving unprecedented amounts of liquidity in and out of commodity futures markets may cause prices to deviate from their equilibrium levels. They see the cause of this phenomenon in the so-called financialization of commodity markets, i.e. the sharp increase in the volume of commodity derivatives as asset classes that attracted portfolio investors. Between 2003 and 2008 speculative investment in commodity indexes was estimated to increase from \$15 billion to around \$200 billion.<sup>17</sup>

43. During the recent boom, the prices of virtually all commodities rose dramatically owing to the steady growth in global income levels and hence demand that was not matched by investment to ensure adequate supply capacity (especially in oil and minerals). As a result, several years of continuous demand increases gradually exhausted the possibility to increase capacity utilization. The long gestation times for new capacity and a history of limited investment during the 1990s meant that capacity could not expand fast enough to keep up with demand as the boom was approaching its peak. In that context, several sectors came to operate at close to full capacity and bottlenecks became more significant.

44. The ability of stocks to smooth out variations of supply and demand was hindered during the boom as stocks were diminished by ever-increasing demand. Thus, by 2008, world food stocks had been on a declining trend for quite a few years, and finally they became too small to inspire confidence. The prices of most commodities peaked when stocks had reached low levels.

<sup>&</sup>lt;sup>16</sup> For example, the demand for food is relatively inelastic because households satisfy their food needs before purchasing other products, especially at low income levels. In the short run, the demand for petrol follows a similar logic. The demand for raw materials can be assumed to be inelastic because it depends on the demand for the final products. Since raw materials comprise only a small part of the total cost of production, changes in their prices have little influence on the demand for the final product. The supply of commodities can be assumed inelastic because the availability of good farming land, mineral deposits and fishery and forest resources tends to be fixed in the short run.

<sup>&</sup>lt;sup>17</sup> "Excessive speculation in the wheat market" report of the Permanent Subcommittee on Investigations, United States Senate, 24 June 2009.

45. There is also a spillover effect, as commodity markets are linked, either because commodities are substitutes for one another or they are on the input side. Thus, an increase in energy prices is transmitted to other commodity sectors as users of energy. The price of substitutes such as maize or sugar cane used to produce biofuels also goes up.

46. Those sceptical of the speculation hypothesis, while accepting the need to control market manipulation, still insist that the recent inflow of liquidity into commodity futures markets did not seriously alter prices. Thus, the International Organization of Securities Commissions (IOSCO) reviewed the reports of its key members (the United Kingdom and the United States) as well as IMF and the European Union and concluded that they "... do not support the proposition that the activity of speculators has systematically driven commodity market cash or futures prices up or down on a sustained basis. These reports suggest that economic fundamentals, rather than speculative activity, are a plausible explanation for recent price changes".<sup>18</sup>

47. While this may be the case for some periods, there may still be negative effects of speculation. Many institutions, including UNCTAD, believe that the rapidly increasing volume of commodity derivatives fuelled the instability and overshooting of commodity prices.<sup>19</sup>

48. The past decade has witnessed a very rapid increase in trading volume on the main commodity exchanges. Thus, the volume of futures and futures options in the United States commodity exchanges increased fivefold from 630 million contracts in 1998 to 3.2 billion contracts in 2007, with the pace of growth accelerating during the period from January to July 2008.<sup>20</sup> This new dynamic was due, inter alia, to the increased involvement of so-called swap dealers and index traders at the expense of traditional informed traders including hedgers with a commercial interest (protecting future prices of the commodities they sell or buy) and speculators taking positions on future price developments and thus providing the market with necessary liquidity and facilitating the process of price discovery. The swap dealers and index traders emerged as important players in commodity exchanges owing to their increasing need to cover exposures arising from selling index funds to investors in the opaque over-the-counter markets. Swap dealers could hedge their exposures without limitation, as they enjoyed exception from position limits.<sup>21</sup> The Commodity Futures Trading Commission of the United States (CFTC) categorized them as hedgers with commercial interests i.e. those having no limits on the volumes of their operations. CFTC later on accepted the need to revisit the issue of adequate categorization of swap dealers.<sup>22</sup>

<sup>&</sup>lt;sup>18</sup> "Report of the Task Force on Commodity Futures Markets", IOSCO, 2009.

<sup>&</sup>lt;sup>19</sup> See UNCTAD Trade and Development Reports, 2008, 2009 (forthcoming).

<sup>&</sup>lt;sup>20</sup> Staff report on commodity swap dealers and index traders with Commission recommendations, CFTC, September 2008.

<sup>&</sup>lt;sup>21</sup> "The global economic crisis: systemic failures and multilateral remedies", UNCTAD/GDS/2009/1, 19 March 2009.

<sup>&</sup>lt;sup>22</sup> CFTC, note 20 above.

49. "Traditional" speculators have an opinion about the direction of prices; index funds, and hence swap dealers, do not claim to hold a view on market trends.<sup>23</sup> As a result, in practice the distinction between hedgers and speculators has become less clear. The latter, owing to the volume of their operations, have contributed to moving prices, although the data, which are so far of a limited nature, cannot yet substantiate their influence. In the case of index funds, it has been argued that "weight of money" influenced markets, that is, buying interest from index funds was so large at times that it overwhelmed the rest of the market.<sup>24</sup>

50. The effect of "weight of money" brought in by "noise and uninformed" traders could also be detected by the spectacular increase in the notional value of over-thecounter commodity derivatives to more than \$12 trillion in June 2008. The deleveraging in the second half of 2008 brought the annual indicator for 2008 back to \$4 trillion, i.e. half the level reached in 2007.<sup>25</sup>

51. CFTC, quoting the example of the New York Mercantile Exchange price of West Texas Intermediate crude oil in the first half of 2008, showed that there was no correlation between prices and open interest positions of index funds. It also admitted that to complete the picture one needs also to have data on over-the-counter markets and other international commodity exchanges. Also according to CFTC, the rate of growth in numbers of futures and options contracts in all United States commodity exchanges was the highest in the first half of 2008.

52. While incremental increases in demand and prices from 2002 to 2007 can be mostly explained by fundamentals, the same cannot be said for the sharp price increases in the first six months of 2008. As there were no serious changes in variables such as geopolitics and refinery shutdowns or stocks (in spite of Asian drawdown) during that period, the plausible explanation of such price volatility is excessive speculation.

53. Proponents of both points of view have stressed the need for radical improvements in reporting the key parameters of all futures markets, including overthe-counter markets, in order to better understand the relative roles of various factors in price formation.

54. The crisis gave rise to proposals that recall the earlier discussion in UNCTAD on regulating commodity prices through international buffer stocks. Under one proposal, Governments would intervene in the case of, for example, oil prices surpassing limits that would be agreed upon by oil-exporting and importing

<sup>&</sup>lt;sup>23</sup> To attract portfolio investors into commodities as an asset class, the swap dealers (mainly banks and other financial institutions) created instruments known as commodity index swaps, exchange traded funds, and exchange traded notes, based on commodity indexes, a weighted composite of selected representative prices or a specific subset of commodity prices. The swap dealers, after selling these instruments to investors, hedge the exposure by buying futures contracts for the commodities in the same proportions as the index. They do so by buying a futures contract for delivery in, for instance, three months, which they sell two months later, thus "rolling over" their holding and keeping it constant so that they are covered at all times.

<sup>&</sup>lt;sup>24</sup> C. L. Gilbert, "How to understand high food prices", paper prepared for the conference "The Food Crisis of 2008: Lessons for the Future", Wye College, 28 October 2008, revised version, 2 December 2008.

<sup>&</sup>lt;sup>25</sup> "The financialization of commodity markets" chap. II, UNCTAD Trade and Development Report 2009 (forthcoming).

countries.<sup>26</sup> Another proposal would try to address food security issues by creating relatively small physical emergency grain reserves and virtual reserves. The latter would operate through a fund of \$12 billion to \$20 billion (i.e. equal to 30 to 50 per cent of grain trade volume) guided by a high-level technical commission with a mandate to intervene in futures markets if prices went beyond agreed lower and upper limits.<sup>27</sup>

55. While commodity speculation might be a matter of concern in major commodity trading centres in developed countries, that is not the case for commodity exchanges in developing countries that are more centred on trading commodities and have on the contrary problems of access to liquidity. Such commodity exchanges are important as they provide trading arrangements supporting the performance of commodity sectors and especially agriculture in those countries.

56. The speculation debate is not over and there is a need to further analyse the impact of financial institutions on futures and spot prices. In the meantime Governments, after such a huge financial crisis and a "correction" in asset prices, should also consider having an opinion on reasonable zones within which asset prices could fluctuate without limits being imposed by regulators. That implies better regulation of all commodity futures markets, including a well-designed and comprehensive data reporting system covering all futures and options contracts and open positions of all players. Measures to deter manipulation by major players and, when necessary, impose position limits on some categories of speculators should also be a part of the regulatory mechanism.

57. One approach to finding ways of discouraging overshooting of prices and building up international cooperation for commodity markets stabilization would be to revisit and reformulate proposals, such as those discussed earlier in UNCTAD, based on cooperative arrangements between commodity producers and users. However, this time the challenge would be to find the right mix of regulatory and market instruments to keep prices within acceptable limits and link them to the marginal costs of production of commodities that are needed for current and foreseeable consumption.

## IV. Implications of the crisis for commodity trade and finance

58. The global economic and financial crisis will clearly have consequences for the way the world economy functions, including for commodity production and trade and the financing of the commodity supply chain. The manner in which Governments and the international community as a whole address these consequences will determine the long-term impact of the crisis on development in the commodity-dependent countries.

<sup>&</sup>lt;sup>26</sup> Arvind Subramaian and John Williamson, "Put the Puritans in charge of the punchbowl" *Financial Times*, 11 February 2009 (interestingly one of the authors originated the notion of the Washington Consensus).

<sup>&</sup>lt;sup>27</sup> Joachim von Braun and Maximo Torero, "Physical and virtual global food reserves to protect the poor and prevent market failure", International Food Policy Research Institute Policy Brief 4, June 2008.

59. Trade is the main channel through which the economic and financial crisis affects the real economy in developing countries. UNCTAD now estimates that exports from the developing world could decline by 9.2 per cent in 2009, and that a sharp fall in commodity prices resulting from the slowdown and demand destruction is threatening the well-being of many developing countries, especially least developed countries that are heavily dependent on exports of basic farm products and industrial raw materials.

60. Despite calls for restraint, several Governments have taken defensive action in the form of trade measures to protect their own industries from the effects of the crisis. Such actions have touched the commodities sector. Thus Governments are trying to protect their own minerals producers from foreign competition, or decrease export taxes on oil or other minerals exports or safeguard the preferential access of local processing industries to mineral raw materials. In agriculture the support continues to be channelled mainly through subsidies in developed countries and financial and technical aid in developing ones.

61. While the actions taken so far do not amount to a return to the kind of protectionism that delayed recovery from the Great Depression in the 1930s, they illustrate the risk of a further long delay to the conclusion of the Doha round of multilateral trade negotiations. Such a slowdown could have serious consequences for developing countries. The growth of international trade is already seriously jeopardized by tighter credit and an expected slow return to growth in developed countries, and it is to be hoped that Governments will find the necessary political will to resist calls for protectionist actions.

62. One consequence of lower growth rates in developed countries and a slower pace of trade liberalization is that Chinese exports of manufactures will grow more slowly than during the past decade and that the world economy will partly lose the growth engine constituted by productivity increases in China as that country focuses more on growth in domestic consumption. However, as already mentioned, growth in Chinese domestic consumption leaves considerable room for expansion of commodities trade, particularly since the emphasis on domestic consumption is accompanied by substantive investment in infrastructure.

63. Export-oriented activities of commodity sectors are suffering from the spectacular fall in world demand and commodity prices. At the same time, commodity trade activities are being negatively affected by the scarcity of trade financing. A near freeze-up of the global banking system makes it harder for commodity-producing countries to obtain the credit and other external financial resources for carrying out trade.

64. A direct consequence of the financial crisis is that conditions for access to all kinds of credit have become tighter. Basel II regulations and failures of the financial industry itself impose more barriers to trade finance. There is a strong risk that credit to commodity-related activities in developing countries could be among the main victims of such tighter conditions, because of both a stronger weighting to country and political risk and the volatility of commodity markets. Also the hurdle rate for investments in commodity production has become higher, while margin requirements for hedging activities have already been raised.

65. As a result, obtaining finance is becoming extremely difficult. The pre-export finance market has dried up, and the bond market and syndicated loans are

effectively non-existent, thereby putting upward pressures on costs. For instance, interest rates on export credits are at more than 300 basis points over interbank refinancing rates, three times or more the going rate a year ago. Increasing costs are also reflected in higher banking costs to confirm letters of credit and other trade loans.

66. The global commodity trade, which represents around 28 per cent of world trade, has been hit by the paucity and high cost of trade finance, which in turn is likely to affect the growth prospects of developing countries. Lending to developing countries has slowed down and resources and foreign direct investment have been withdrawn as part of a deleveraging process, while aid flows are under threat. That implies that if trade finance on the order of \$250 billion is made available in the next two years, as announced at the G20 meeting in London in April 2009, nearly one third of it should go to commodity exporters.

# V. Implications of the crisis for commodity exporting and importing countries

67. As has already been noted, commodity prices have held up better than might have been expected in the present crisis and they remain at levels well above historical lows. Countries exporting agricultural products are also experiencing relatively solid demand conditions, while energy and minerals exporters face reductions in both prices (although, again, to levels that are above the historical trend) and volumes. The impact on employment is relatively limited, since the latter two sectors are capital-intensive, while the effect on government budgets can be severe. Although sufficiently detailed data are still lacking, it is probable that developing countries mainly exporting manufactures or services have been harder hit by the recession than commodity exporters. The situation of some countries has been further exacerbated by the resumed rise in prices of food products, particularly grains. At the same time the commodity importers enjoyed terms of trade gains, especially in the period between September 2008 and April 2009.

68. In fact, despite increased global food production, the food crisis is far from over. One of the reasons is that the increase in cereals production in the past couple of years took place mainly in developed countries and in China. In most developing countries, grains production has been constant or declining. Moreover, the poor in developing countries are being hit both by high food prices and by the general economic downturn, which reduces employment and incomes. The result is a worrying increase in poverty, which will continue unless measures are taken to improve food security. The impact of the increase of food prices on international markets has been severe on net food buyers in countries in which consumers are insufficiently insulated from such impacts. Particularly at risk are the landless labourers and the urban poor. But among the losers are also a large number of smallholders, themselves net food buyers. They are unable to benefit from the increase in prices on international markets because it comes at a time when the price of their inputs has hit record levels and they have no bargaining power with traders connected to global supply chains.

69. Governments have taken a number of measures to ensure access to food for their population. However, some of these measures, particularly trade policy measures, sought primarily to keep prices low on domestic markets (or to limit their

increase) for the benefit of all consumers, including those who would have been able to support higher prices. It is also striking that these measures were adopted without consideration of their impact on the ability of other countries to feed their populations. A number of international political initiatives, most importantly through the High-Level Task Force on the Global Food Security Crisis set up in 2008, aim to ensure better coordination and preparation so as to limit the impact of any future crises.

70. For the longer term, the most important objective is to raise agricultural productivity in the poorest countries, particularly in Africa and particularly for small farmers. At the national level, this entails improving access to credit, ensuring that farmers have secure title to their land and facilitating farmers' access to markets. At the international level, it means eliminating trade-distorting subsidies and improving discipline in the use of non-tariff measures as well as increasing financial and technical assistance to agriculture in developing countries.

71. An issue attracting attention is the purchase of agricultural land, in Africa, Latin America and Asia, by institutions in certain food-importing countries. Though this phenomenon is not entirely new, it has accelerated since the global food crisis of 2007-2008. The markets for agricultural commodities were seen to be increasingly unstable and volatile, and therefore less reliable for net food-importing countries. As a result, some net food-importing countries have turned to acquiring land abroad in order to achieve food security. While this development offers opportunities to host countries in terms of employment creation, technology transfer, access to markets and public revenues, there are also risks, mainly having to do with the land tenure rights of the local rural population.

# VI. Towards better policy and institutional frameworks for the global commodity economy

72. Owing to the volatile international economic environment, many developing countries, including commodity exporters and commodity importers, will probably not be able to achieve the Millennium Development Goals by 2015.

73. The instability of commodity markets, price volatility in particular, is back on the international economic agenda. While negotiations at UNCTAD in the twentieth century aimed at introducing more stability to commodity markets through internationally managed commodity buffer stocks did not succeed, various commodity risk management techniques at the micro level, such as futures trading, also failed to resolve the problems of instability and sometimes even aggravated them.

74. The international community is searching for ways out of the current crisis, which is one of the most dramatic in economic history. While the commodity boom may have played a marginal role in triggering the crisis through its contribution to inflation, the economic crisis in its turn brought about a drastic decline in the prices of nearly all commodities. It is therefore important for the international community, in the search for more stable and positive trade and development dynamics, to understand the realities of the global commodity economy. On that basis, more lasting solutions and arrangements can be devised.

75. The national and international strategies to develop both the agricultural and minerals sectors need to be complementary and mutually supportive. Increasing food production in poor countries, particularly in Africa, by raising agricultural productivity should be considered one of the priorities in the agricultural sector. Of fundamental importance here is to improve the functioning of national and regional food markets so that small farmers can be assured an outlet for their products at fair and transparent prices, which will allow them to risk investing in increased and diversified production. At present, production is stagnant partly because some farmers are reluctant to enter into debt to increase capacity or introduce new technology, as there is no assurance of reaping rewards from their investment. Measures to remedy the situation should, therefore, include not only improving access to credit (based on secure titles to land), but also the creation of local and national markets, including commodity exchanges and commodity trade finance through warehouse receipt systems; improved market intelligence, particularly price information; and support in achieving quality standards.

76. It is particularly important to reinforce the role of farmers' cooperatives so that small and isolated farmers can be more efficient in buying inputs, accessing finance and investing. Through cooperatives, small farmers could negotiate better terms of credit and have access to crucial market information, use warehouse receipts or directly reach commodity buyers.

77. Selective government support, in the framework of sound national lands and strategies, can facilitate the above conditions for agricultural development. Support measures could include direct financing by agricultural development banks, the creation of research and development centres to work closely with cooperatives, and the establishment of experimental agricultural production centres encouraging diversification and value addition.

78. For the extractive industries, key policy issues include more efficient and transparent revenue management and fair conditions surrounding investments with a view to achieving more effective production of mineral resources and a positive spillover effect on the rest of the economy. Countries with strong public-sector companies in oil and other mineral sectors should help their companies acquire the modern technologies and skills needed to effectively manage the complex capital-intensive extractive industries. Countries that are more reliant on foreign investment should help their companies to reach fair conditions of cooperation with transnational corporations, entailing technology transfers and training of local staff and thus building the capacity to operate with more autonomy. At the same time excessive expectations on both sides and communication difficulties may decelerate this process. Making extractive industries profitable and an engine for development and diversification is the twin objective to be pursued by mineral-exporting countries, an objective that should be fully supported by the international community.

79. Finally, low-income developing countries that are net food and other commodity importers need to receive continuous support from the international financial institutions and the development community at large to meet their basic commodity needs without compromising their programmes of socio-economic development, including poverty alleviation.

80. The reinforcement of the UNCTAD mandate on commodities in the Accra Accord, including the establishment of multi-year expert meetings on commodities

and development and the creation of new multi-stakeholder forums on commodities, holds out hope of bringing together all key stakeholders of the commodity economy. That would create a unique opportunity to relaunch a virtuous circle whereby the ideas brainstormed and agreed upon at high-level multi-stakeholder meetings would feed into an intergovernmental process and national and regional commodity policies. Improving on policies and adopting transparent and equitable rules of the game should permit the commodity sector to become an engine for development and a key instrument for poverty reduction. The search for exit strategies from the global crisis creates an auspicious environment for new initiatives to be launched and agreements to be reached.

81. The momentum for change needs to be harnessed before the sense of urgency for reforms fades away. This would imply major shifts in policy paradigms and improvements to the institutional arrangements for cooperation between commodity exporting and importing countries, with a greater role for the commodity-dependent developing countries and more active participation by the corporate sector in the emerging cooperative frameworks. For the more than 90 countries that depend on primary commodities for the majority of their exports, better policy and institutional frameworks and public-private partnerships would eventually permit better integration in commodity supply chains, improved possibilities for successful diversification of their economies and, hence, better prospects for their social and economic development.

# Annex I

# Boom, bust and partial recovery of commodity prices in 2008-2009

|                                     | Price in | Percentage change |          |              |                     |  |
|-------------------------------------|----------|-------------------|----------|--------------|---------------------|--|
| Commodity group                     | Peak     | Bust              | May 2009 | Peak to bust | Bust to<br>May 2009 |  |
| All commodities (excluding crude    |          |                   |          |              |                     |  |
| petroleum, in current dollar terms) | 299.5    | 185.6             | 208.2    | -38          | +12                 |  |
| Food                                | 280.6    | 190.1             | 215.6    | -32          | +13                 |  |
| Wheat                               | 381.0    | 198.1             | 225.7    | -48          | +14                 |  |
| Maize                               | 332.2    | 179.2             | 205.6    | -46          | +15                 |  |
| Rice                                | 498.2    | 265.5             | 265.5    | -47          | 0                   |  |
| Bananas                             | 244.8    | 172.8             | 211.4    | -29          | +22                 |  |
| Fish meal                           | 298.3    | 238.0             | 267.1    | -20          | +12                 |  |
| Tropical beverages                  | 193.7    | 152.4             | 178.7    | -21          | +17                 |  |
| Coffee                              | 216.3    | 157.9             | 176.3    | -27          | +12                 |  |
| Cocoa                               | 340.4    | 232.9             | 279.5    | -32          | +20                 |  |
| Vegetable oilseeds and oils         | 370.5    | 174.1             | 237.2    | -53          | +36                 |  |
| Palm oil                            | 402.6    | 157.3             | 258.2    | -61          | +64                 |  |
| Agricultural raw materials          | 228.6    | 134.4             | 141.0    | -41          | +5                  |  |
| Cotton                              | 135.4    | 86.9              | 104.6    | -36          | +20                 |  |
| Rubber                              | 464.1    | 196.1             | 235.9    | -58          | +20                 |  |
| Minerals, ores and metals           | 391.6    | 193.2             | 228.6    | -51          | +18                 |  |
| Iron ore                            | 526.0    | 352.7             | 352.7    | -33          | 0                   |  |
| Aluminium                           | 198.2    | 85.8              | 94.2     | -57          | +10                 |  |
| Copper                              | 479.0    | 169.4             | 252.0    | -65          | +49                 |  |
| Nickel                              | 361.4    | 112.1             | 146.2    | -69          | +30                 |  |
| Lead                                | 678.3    | 212.4             | 317.6    | -69          | +50                 |  |
| Zinc                                | 222.6    | 97.6              | 131.5    | -56          | +35                 |  |
| Tin                                 | 442.7    | 196.4             | 253.6    | -56          | +29                 |  |
| Gold                                | 347.1    | 272.7             | 332.8    | -21          | +22                 |  |
| Crude petroleum                     | 469.5    | 147.1             | 205.9    | -69          | +40                 |  |

Source: UNCTAD calculations based on statistics from UNCTAD Commodity Price Bulletin.

# ۲ Annex II

# Shares in world commodity imports, 1996-1998 and 2004-2006

|  | All commodities |           | Fuels     |           | Ores and metals |           | Agricultural raw<br>materials |           | Forestry  |           | All food  |           | Fishery   |           |
|--|-----------------|-----------|-----------|-----------|-----------------|-----------|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|  | 1996-1998       | 2004-2006 | 1996-1998 | 2004-2006 | 1996-1998       | 2004-2006 | 1996-1998                     | 2004-2006 | 1996-1998 | 2004-2006 | 1996-1998 | 2004-2006 | 1996-1998 | 2004-2006 |
| Developed economies  | 69              | 66        | 68        | 67        | 70              | 60        | 68                            | 62        | 77        | 69        | 69        | 69        | 83        | 79        |
| Developing economies                                       | 28              | 32        | 28        | 31        | 28              | 38        | 30                            | 37        | 22        | 30        | 27        | 27        | 15        | 19        |
| Asia   | 21              | 25        | 21        | 25        | 23              | 33        | 24                            | 30        | 17        | 26        | 17        | 17        | 11        | 14        |
| China  | 2               | 6         | 2         | 5         | 4               | 14        | 5                             | 14        | 3         | 13        | 2         | 3         | 1         | 4         |
| India  | 2               | 3         | 2         | 3         | 1               | 2         | 1                             | 2         | 1         | 2         | 1         | 1         | 0         | 0         |
| Transitional economies                                     | 3               | 2         | 3         | 2         | 2               | 2         | 1                             | 2         | 1         | 1         | 4         | 4         | 1         | 2         |
| World imports (in<br>billions of United States<br>dollars) | 1 293           | 2 844     | 428       | 1 424     | 178             | 407       | 132                           | 177       | 62        | 87        | 478       | 704       | 53        | 78        |

Source: UNCTAD calculations based on COMTRADE data.