

November 27, 2008

## The commodity price correction is justified, but concerns about shortages could resurface

After posting spectacular gains in the past few years, the prices for commodities in the last few months have suffered the worst correction in their history. Most commodities prices have fallen by more than 50% from their peak prices.

While spectacular, the drop in prices seems justified by the swift degradation of global economic outlooks. The demand for many commodities has already slowed down markedly, even declining in some cases. This trend could continue in the short term, exerting even further downward pressures on prices. The overvaluation of commodity prices before the correction, and changes in some financial trends—especially once the credit crisis intensified—escalated the intensity of the correction.

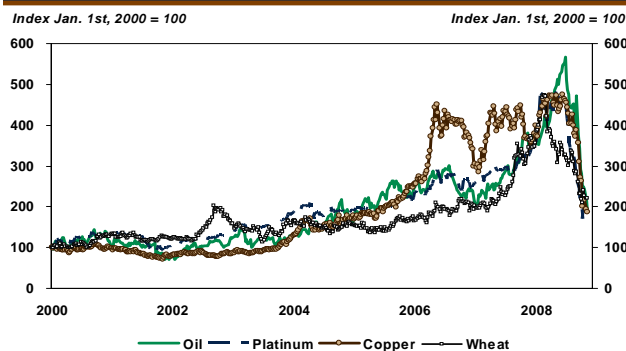
Faced with plummeting prices and tightening credit conditions, producers of raw materials reduced the pace of their activities and deferred, and in some cases even dropped, major investment projects. This should give way to rising prices as soon as the economic environment stops deteriorating. The slowdown in investments could bring concerns of a shortage back to the forefront in the medium term, especially in the case of oil.

### AN UNPRECEDENTED PRICE MELTDOWN...

The commodities market has experienced a sea change over the past few months. The swift, widespread and almost constant price increases seen these past few years suddenly gave way to a sharp correction (graph 1). The most stunning example of this reversing trend is the price of a barrel of oil. After trading for less than US\$20 per barrel in early 2002, the price of a barrel of oil reached a historic peak of US\$145 in mid-July, only to lose more than two-thirds of its value in a few short months to under US\$50 a barrel.

The situation with oil is no exception, commodity prices have fallen sharply across the board in the past few months. The drop was particularly sharp for energy, but other categories have also been hard hit (graph 2). When compared to their peak values, prices for copper, nickel, zinc, lead, platinum, palladium and wheat have plummeted by more than 60%.

Graph 1 – After reaching peaks, commodity prices drop sharply



Sources: Datastream and Desjardins, Economic Studies

It is well known that since raw materials prices are cyclical, they tend to be subject to major price fluctuations. However, we have never seen a correction as sharp as the one witnessed

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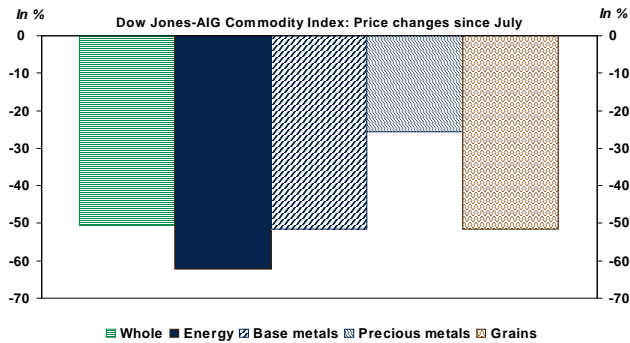
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**NOTE TO READERS:** The letters **k**, **M** and **B** are used in texts and tables to refer to thousands, millions and billions respectively.

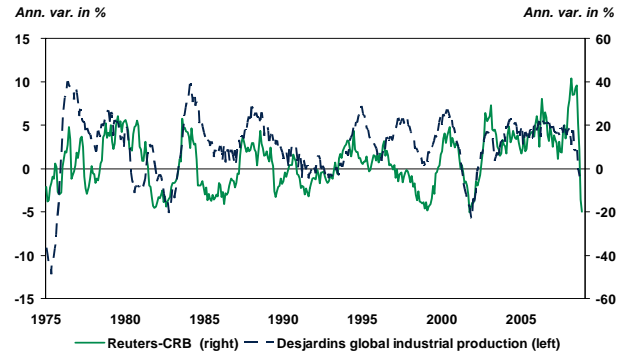
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**Graph 2 – All categories of raw materials are affected**



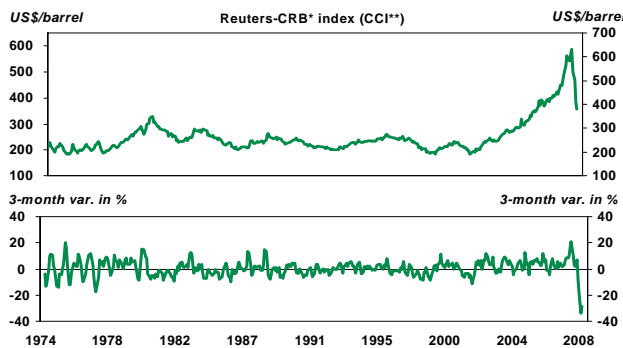
Sources: Datastream and Desjardins, Economic Studies

**Graph 4 – Prices for raw materials are cyclical**



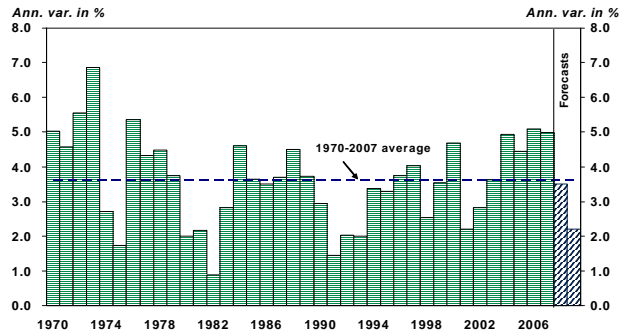
Sources: Datastream and Desjardins, Economic Studies

**Graph 3 – This correction exceeds all previous corrections**



\* Commodity Research Bureau; \*\* Continuous Commodity Index.  
Sources: Datastream and Desjardins, Economic Studies

**Graph 5 – After running on high speed, global economy comes to a screeching halt**



Sources: International Monetary Fund and Desjardins, Economic Studies

these past few months since 1956, when the Commodity Research Bureau (CRB) started to calculate its commodity price index (graph 3).

**...JUSTIFIED BY DETERIORATING ECONOMIC OUTLOOKS**

Faced with such steep declines in prices, we have to ask some questions. Is this decline logical or is it merely a reflection of investors' irrational panic? In our opinion, the price decline is mostly justified by the fundamental factors affecting the supply and demand for raw materials.

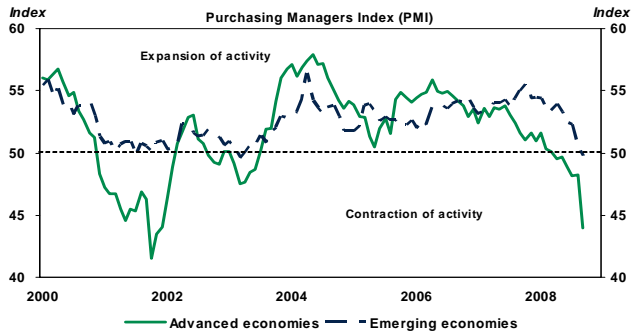
Commodity prices, especially those for energy and industrial metals, always depended heavily on the pace of global economic growth (graph 4). The sharp increases of the past few years occurred when the economy was running full steam ahead. The real global GDP rose by 4.9% annually between 2003 and 2007 vs. an average of 3.6% since 1970 (graph 5). Such rapid growth, especially in emerging Asian economies, led to a swift rise in demand for commodities which was reflected in their prices.

This economic environment has recently gone through a sea of change. The correction in the U.S. real estate market and its

end result—the current financial crisis—has brought global growth to a screeching halt. The economic difficulties that first appeared to be concentrated in the U.S. have now spread to the entire planet. Japan, the United Kingdom and the euro zone are already in recession and the U.S. economy is headed straight for a major contraction. Even Canada's economy won't be able to avoid a mild recession. The decoupling theory has thus far proved to be completely false and the emerging economies are now about to be contaminated by the economic slowdown (graph 6). While China's economy is expected to remain relatively strong with growth pegged at around 8%, industrial production and new motor vehicle sales clearly indicate a slowdown (graphs 7 and 8). This deterioration is a big concern for the Chinese authorities who have already announced an economic stimulus plan worth approximately US\$600M. A global economic recession—or growth of less than 3%—is all but assured in 2009.

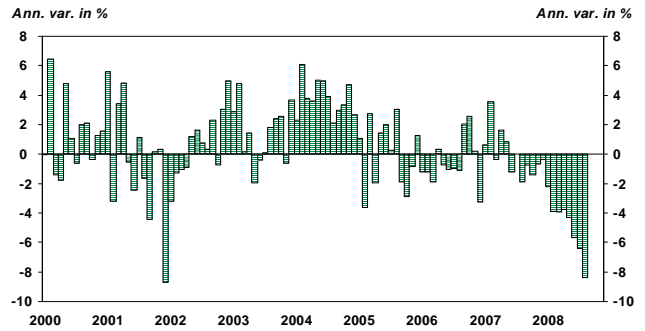
We have gone from a highly favourable economic environment for commodities to a recession, a situation that is very negative in terms of demand for raw materials. In addition, commodity consumption had already started to weaken following the sharp rise in prices since the start of the decade. As a result,

**Graph 6 – Economic slowdown now impacting emerging countries**



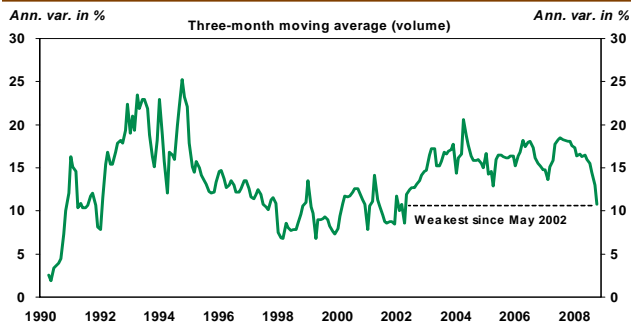
Sources: International Monetary Fund and Desjardins, Economic Studies

**Graph 9 – Petroleum products consumption down sharply in the U.S.**



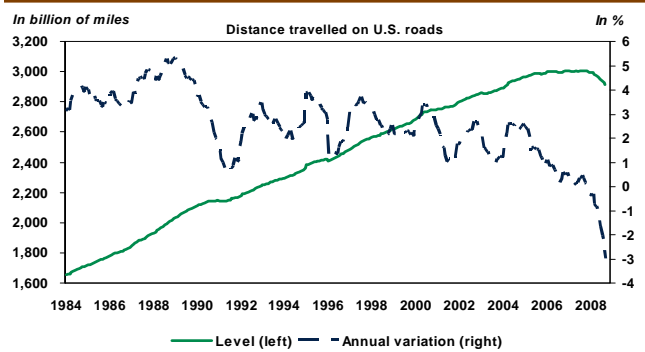
Sources: Energy Information Administration and Desjardins, Economic Studies

**Graph 7 – China: Industrial production slowing down quickly**



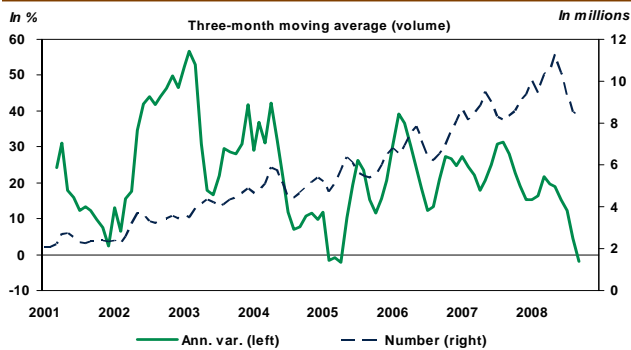
Sources: Datastream and Desjardins, Economic Studies

**Graph 10 – U.S. motorists changing their habits**



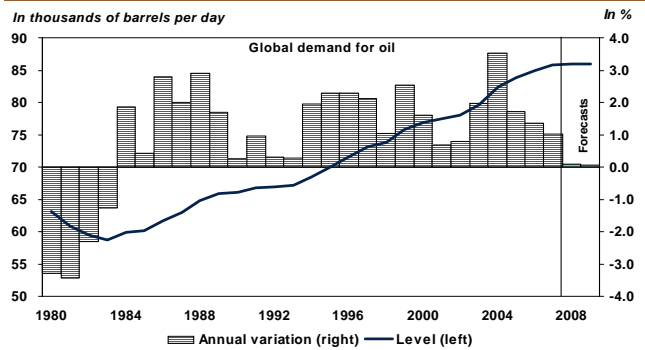
Sources: Federal Highway Administration and Desjardins, Economic Studies

**Graph 8 – China: Sales of transport vehicles decline**



Sources: Datastream and Desjardins, Economic Studies

**Graph 11 – Demand for oil: First drop in 25 years?**

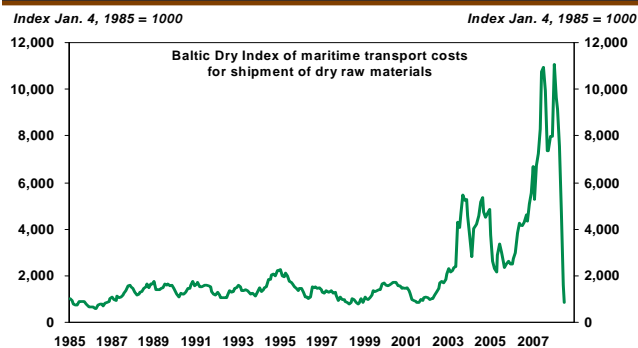


Sources: Datastream, Energy Information Administration and Desjardins, Economic Studies

demand for petroleum products has fallen by about 6% in the United States since the start of 2008 (graph 9) while motorists have been cutting down on driving (graph 10) and the economic slowdown is limiting the energy needs of businesses. The Energy Information Administration (EIA) is now forecasting that global demand for oil will be nearly flat in 2008 and 2009. In our opinion, a first decline in 25 years is highly likely (graph 11).

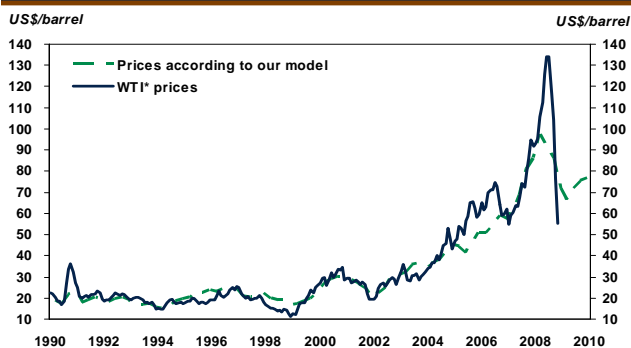
Shifts in demand for other commodities are more difficult to observe, but many signs confirm that a major slowdown is underway. The spectacular drop in maritime transport costs for the shipment of dry raw materials is a clear indication of weakened demand for these products (graph 12), much like the rebound in base metals inventories (graph 13). In addition, the distress in the residential construction and automobile sectors worldwide can only lead to a decline in demand for

**Graph 12 – Sharp drop in transport costs, a sign of a decline in demand for raw materials**



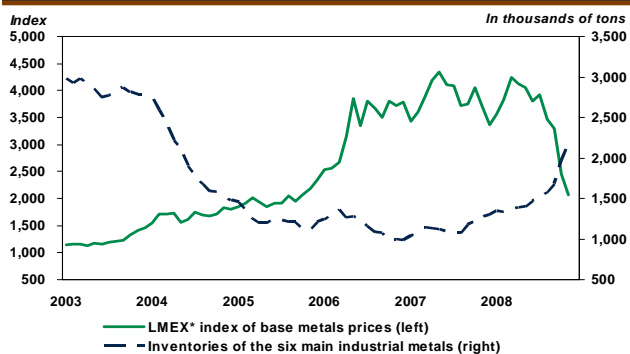
Sources: Datastream and Desjardins, Economic Studies

**Graph 14 – Oil prices now below the value projected by our model**



\* West Texas Intermediate. Sources: Datastream and Desjardins, Economic Studies

**Graph 13 – Rebound of metal stocks reflects downturn in global demand**



\* London Metal Exchange Index. Sources: Datastream, International Monetary Fund and Desjardins, Economic Studies

several metals, especially aluminium, copper, zinc, lead, platinum and palladium.

**FINANCIAL FACTORS INTENSIFIED THE CORRECTION**

The current level of prices for most commodities appears justified, given the difficult economic environment. However, price fundamentals for raw materials did not change overnight and financial factors intensified the sharp correction in prices.

First of all, the growing number of speculators in the commodities market bumped up prices over justifiable levels based on fundamentals and delayed the onset of the correction. In our opinion, the price increases for most resources should have slowed down significantly several quarters ago, as soon as the economic outlooks started to deteriorate. As such, our model of equilibrium oil prices indicates that soaring prices above US\$100 a barrel were not justified based on the fundamentals (graph 14). The bursting of this speculative bubble and the reversal of investors' positions explain the extent to which prices have declined.

Movements in the U.S. dollar also left their mark on commodity prices. Since raw materials prices are expressed in U.S. dollars,

they have tendency to trend in the opposite direction of the greenback to maintain a stable price in other currencies, all things being equal. After dropping vs. most other currencies in the past few years, the greenback's value has risen sharply since last summer, which further intensified the price correction. This is particularly true for gold, the price of which is largely determined by financial factors (graph 15). The deepening financial turmoil since the bankruptcy of Lehman Brothers in mid-September largely explain the reversal of the U.S. dollar's trend and accelerated the liquidation of speculators' positions.

**Graph 15 – Greenback's rebound hindering the price of gold**



Sources: Datastream and Desjardins, Economic Studies

**DOWNWARD PRESSURES COULD REMAIN**

Current prices for raw materials are already a clear reflection of the global recessionary climate expected in 2009. The price correction is advanced and, as mentioned earlier, the price of oil has already fallen slightly below the equilibrium levels calculated by our model. Downward pressures on commodity prices could continue in the short term, however.

To begin with, the next few months will see more bleak economic statistics being reported, and the economic environment could deteriorate more than expected. Secondly, everything seems to be pointing to continued financial turmoil,

so financial factors should continue to exert downward pressures on prices. Lastly, any subsequent correction following a major overvaluation usually sees prices fall below their equilibrium levels. As such, we will have to wait to see an improvement in the global economic outlooks or for financial pressures to ease up before we see commodity prices trending upward again.

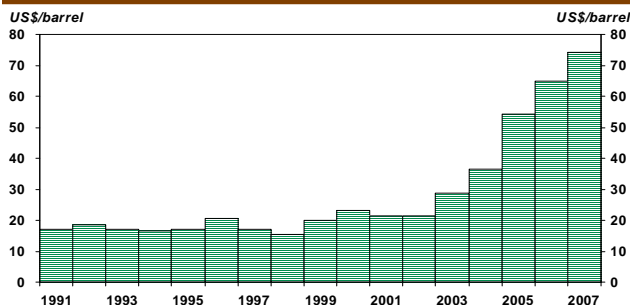
### DECLINING SUPPLY OF RAW MATERIALS

Up to now, we focused essentially on commodity demand. Even if demand continues to be the determining factor for short-term prices, we cannot turn a blind eye to the significant changes taking place in the supply of commodities.

The spectacular correction we have witnessed these past few months saw prices for several raw materials fall below some producers' marginal costs. For example, it is estimated that about 30% of global production of nickel is no longer profitable. The largest metal producers keep announcing cuts to production, with some even closing their mines to limit losses and try to stem plummeting prices.

OPEC (Organization of the Petroleum Exporting Countries) also reacted by reducing its quotas by 1.5 million barrels a day in October. OPEC should call for another cut of at least 1 million barrels by the end of the year to try to bring prices back to its target of US\$85 per barrel. It must be noted that rising prices for raw materials these past few years went hand in hand with rapidly rising production costs. It is estimated that the marginal cost to produce a barrel of oil jumped from about US\$20 at the start of the decade to US\$75 in 2007 (graph 16). The same phenomenon was noted for most metals. Up to now, announcements that supplies are being cut have not had an impact on the price of raw materials, since demand seems to be slipping even more rapidly.

**Graph 16 – Marginal production cost of a barrel of oil**

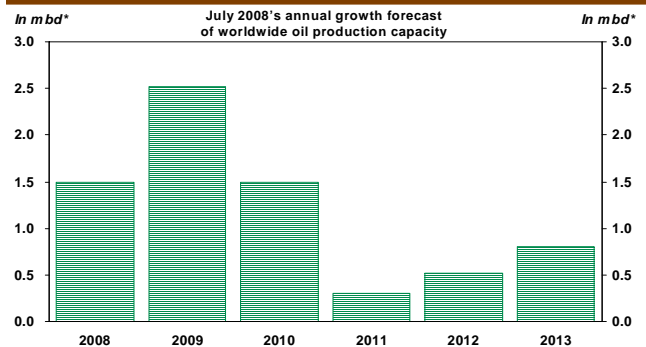


\* Estimated as the average of the highest-cost producers.  
Sources: International Monetary Fund and Desjardins, Economic Studies

Furthermore, reduced prices coupled with limited access to credit are leading some firms to pull out of some major

investment projects, notably in the mining sector. The development of new oil deposits is also threatened as multi-billion dollar investments in tar sands, for example, have been delayed. Declining investments in the oil sector are especially worrisome for the future since the International Energy Agency already forecasted last summer that the growth of crude oil supplies would slow down sharply as of 2011, bringing the spectre of shortages back to the forefront (graph 17). In the wake of the price meltdown, the outlook for growth in oil production may very well have to be revised downward once again.

**Graph 17 – Even with record prices, supply growth prospects were limited**



\* Millions of barrels a day.  
Sources: International Energy Agency and Desjardins, Economic Studies

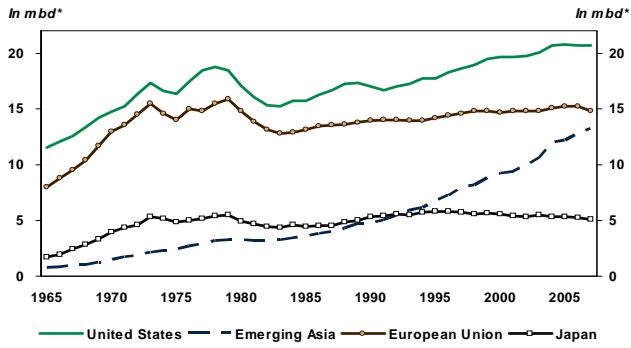
### CONCLUSION: RELATIVELY WEAK PRICES IN THE SHORT TERM, BUT PRICES COULD REBOUND THEREAFTER

The recent drop in commodity prices provides some measure of relief to businesses and households, especially for motorists, which is welcome news in this economic environment. By reducing inflation pressures, the price correction also allows the monetary authorities to act vigorously in supporting the economy. Even if the correction seems to be well advanced, downward pressures will remain on raw materials' prices in the coming months, while the soft demand for commodities and the financial turmoil should remain dominating factors.

Commodity prices should, however, start to trend upward sometime in 2009. The major production cuts announced by OPEC and metal producers will gradually start to be felt on the global commodity markets. Even grain production could disappoint now that restricted access to credit and falling prices is reducing the use of fertilizers. The government of Brazil has already had to significantly revise downward its expected crop of soybeans and corn next year. In this context, concerns of a shortage could come up again as soon as the global economic environment stops deteriorating, which should allow prices for raw materials to rise once more. In addition, while they haven't been spared from the current crisis, the emerging economies should generally continue to

grow at a good pace over the next decade, supporting both demand and prices for raw materials (graph 18).

**Graph 18 – Oil demand growth is increasingly driven by emerging countries**



\* Millions of barrels a day.  
Sources: British Petroleum and Desjardins, Economic Studies

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