ThinkBig

Commodity Prices

The transition risk

By John Robertson

Reading time: 4-8 mins

Ongoing strength in global commodity markets depends on there being a seamless transition between the beneficial effects of monetary stimulus, as it is withdrawn, and the impact of an acceleration in global growth.

This note highlights the interaction between two potentially important influences on resource sector market conditions:

- the global monetary environment; and
- the surge in raw material usage which usually accompanies the early stages of economic recovery.

How these interact in the next year is likely to have an impact on the strength of the Australian economy and on overall investment market conditions.

Inventory adjustment model

Previous *ThinkBig ATCDigest* articles, such as those in July and August 2006 and April 2008, highlighted the role of inventory adjustment in setting commodity prices.

The inventory adjustment model suggests that a reduction in inventories below a critically low level will result in a disproportionate price response, even if earlier inventory reductions have had little impact. In other words, the statistical relationship between industrial raw material commodity prices and inventories is strong, but non-linear.

When inventories are very low, raw material prices acquire a risk premium reflecting supply shortages and the possibility that individual users may be unable to obtain the quantities of raw materials needed for production. Additional speculative activity, to take advantage of these already tight markets, further supports rising prices.

The monetary impact

When the supply of money increases by more than the amount needed to lubricate the real economy, it tends to flow into alternative uses with a more speculative orientation.

Excess liquidity might flow first into real estate or the stock market, but after that, will come art or horse racing or, along the way, physical commodities. It will keep finding more and more ever riskier destinations until the money suppliers pull back on the levers to once again constrain supply.

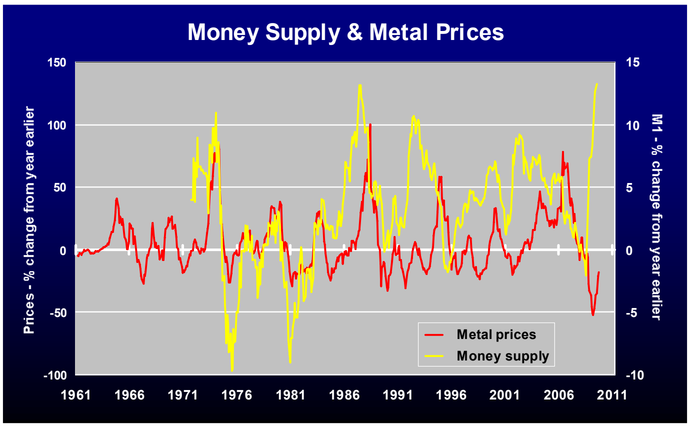
In the context of the hard commodities that are important for the Australian economy, there is ample evidence of a connection between global money supply movements and movements in prices.

For all the talk of the impact of China and India on commodity markets, US monetary policy settings alone would have suggested, on the historical evidence, that metal prices would be pushing to new record high levels in 2007, as discussed in the August 2006 *ATCDigest* well before commodity prices had reached their peak.

Recent history and outlook

Between 2001 and 2004, OECD money supply **(refer M1 in the below chart)** grew by an average of 9.7% per annum.

While Chinese demand is mostly credited with the subsequent hike in commodity prices, the common feature in all cycles of the past 50 years has been above average money supply growth generated by the authorities in the advanced economies.



During 2007 and 2008, money supply growth rates decelerated sharply, dropping to 2.6% over the year to August 2008, leading to the normal effect on metal price speculation. The IMF index of metal prices subsequently fell by 53% between March 2008 and February 2009.

Since then, money supply growth has accelerated dramatically, reaching 12.9% over the year to August 2009, just as inflation was plummeting from over 4½% to less than zero, pushing the real rate of money supply growth to nearly 15%. The money supply expansion in the past 12 months has been faster than at any other time over the past 40 years.

Not surprisingly, and consistent with history, metal prices began to improve. Copper, zinc and nickel, for example, have risen by as much as 90-100% from their most recent cyclical lows.

Monetary authorities face many pressures to maintain their current stance, including the need to restore employment growth. Nonetheless, the momentum of money supply growth should diminish as interest rates stabilise and the various emergency programs, implemented last year, run their course.

In line with our analytical framework, prices should fall as this important price prop is removed, unless there is a compensating influence from another source.

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Output momentum

At this point in the economic cycle, the compensating influence should come from demand and its beneficial effect on inventory levels.

The **second chart**, using zinc as an example, illustrates the connection between metal consumption and the momentum of economic activity. A reader can review the earlier articles referred to above for a discussion about the importance of the momentum of output growth versus growth (i.e. acceleration versus speed) as indicators of increasing raw material usage.

The vertical axis shows annual percentage movements in metal consumption. The horizontal axis shows changes in the rate of GDP growth. Two successive years of 5% growth, in this instance, shows up as a zero change. An acceleration in the rate of growth from 2%, say to 5%, shows up as a three percentage point upward movement.

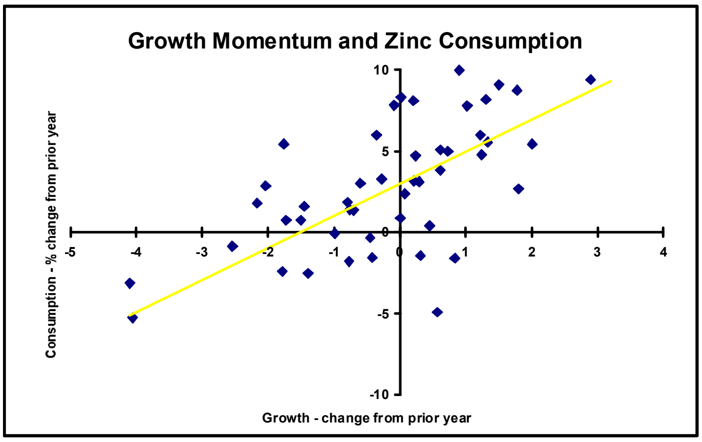
There are three reasons to expect a sharp acceleration in raw material intensive spending in the early stages of economic recovery.

1. Business investment spending has probably been on hold. Although excess capacity persists, some delayed spending has become critical and must proceed. Attempts to lower costs and postpone the need to employ more staff might also necessitate increases in spending.

2. Consumers would have delayed spending on durables by as much as several years. Some catch up needs to occur and rebuilding consumer confidence will lead to a bunching up of purchases over a limited time frame.

3. Except in its initial stages, business inventories would normally decline through a recession. As expectations improve, restocking begins, firstly, relative to cyclical low production levels and, subsequently, relative to the ensuing higher production levels.

The International Monetary Fund (IMF) has estimated that global growth will have fallen by 6 percentage points in 2009. The most recent forecasts of zinc consumption (a 5.6% fall in 2009) by the International Lead Zinc Study Group, is at the extreme end of outcomes, but in line with the 50 years of historical data reviewed here. This relationship also offers some important guideposts for understanding conditions in 2010.



The transition

In practice, monetary authorities in the advanced economies will be reducing policy stimulus in the coming year through a direct reversal of policy, as in Australia, or through taking no further action, as in most other places.

The slowing growth in monetary aggregates will have a negative effect on commodity prices as funding for market speculators becomes more expensive and harder to obtain.

If the monetary stimulus has done its job, there should be an output growth acceleration during 2010.

According to the IMF, growth is going to accelerate from a global output contraction of 1.1% in 2009, to a 3.1% expansion in 2010. While this higher rate of growth is not unusual in a world that has grown at an average pace of 3.3% a year over the past 20 years, the acceleration implies a gain in zinc consumption in 2010 of up to 10% based upon the historical relationship illustrated in the chart. The ILZSG is actually forecasting a gain of 11.9%, another outcome which would be very close to the average historical experience.

The potential for an acceleration in output growth will be greater in the advanced industrial economies than in China. Although the Chinese economy continues to grow strongly and at a faster rate than the advanced economies, its pace of growth is not expected to accelerate significantly. The IMF is forecasting a Chinese output gain of 9.0% in 2010 after a similar gain of 8.5% in 2009.

Against this background, most of the recovery burden will fall on the advanced economy countries.

Realisation of the currently anticipated recovery will help to boost raw material consumption. Assuming limited changes in raw material production, the extra demand should support an initial stabilisation in inventories and, if strong enough, some reduction.

The inventory adjustment model suggests that lower inventories are a necessary ingredient for subsequently firmer prices. In the ideal world, the output growth acceleration occurs just as the monetary stimulus is easing off, giving us a seamless transition from one influence to the other and, consequently, ongoing support for prices of basic industrial commodities.

The investment risk, under these circumstances, will arise from the possibility that the transition falls short of the ideal and that there is a gap in timing between the removal of monetary stimulus and the beginning of the raw material consumption surge accompanying the early stages of recovery.

In that event, we would face another sharp cyclical downturn while we wait for the momentum to build a sufficiently powerful head of steam to take us to the next stage of the cycle.

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