

Global Growth

What it means for raw materials

By John Robertson

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A likely global growth slowdown poses a challenge for the current resources cycle.

The world has experienced an unprecedented period of global economic expansion which is showing the first signs in almost seven years of faltering.

The International Monetary Fund (IMF), among other organisations, has begun cutting back its forecasts of global economic activity for the year ahead. Over the past year, the IMF has pulled back its 2008 global growth forecast from an initial 4.4% to 4.1% and, now, 3.7%. If realised, that would be down 1.2 percentage points on last year's currently estimated outcome of 4.9%.

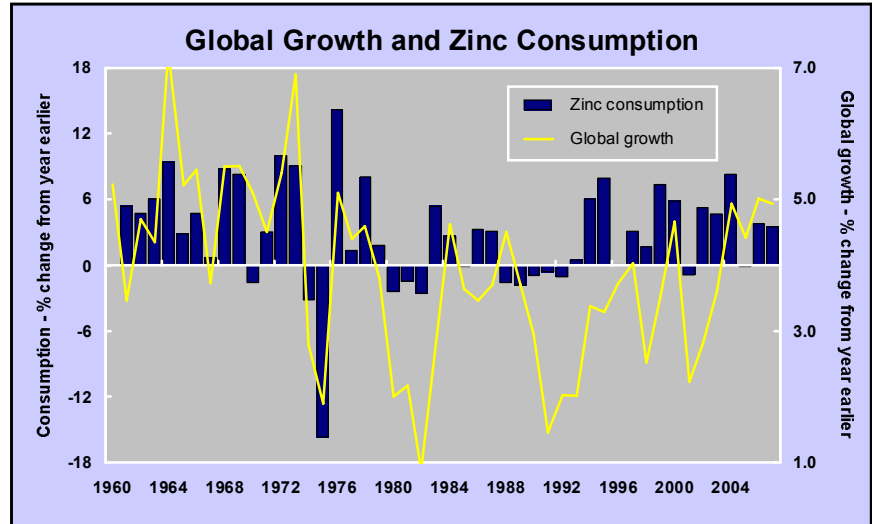
A large proportion of the cutback in the forecast is due to a changing view of economic conditions in the USA, which accounts for 21.4% of global output, according to the IMF's latest analysis. The IMF has reduced its 2008 US growth forecast from an uncomfortably slow 2.7% to a meagre 1.3%.

At one level, the newly revised global forecast does not appear so awful. It is still above the average growth rate of the past 20 years. However, there are some important distinctions between growth and momentum which need to be kept in mind when making a judgment about how these conditions might affect demand for Australia's commodity exports.

Painting the picture...

To illustrate the effect of a slowdown in growth, I have used data on global zinc consumption for the nearly five decades since 1960. The main conclusions drawn from the relationships explored here can be generalised to other raw materials.

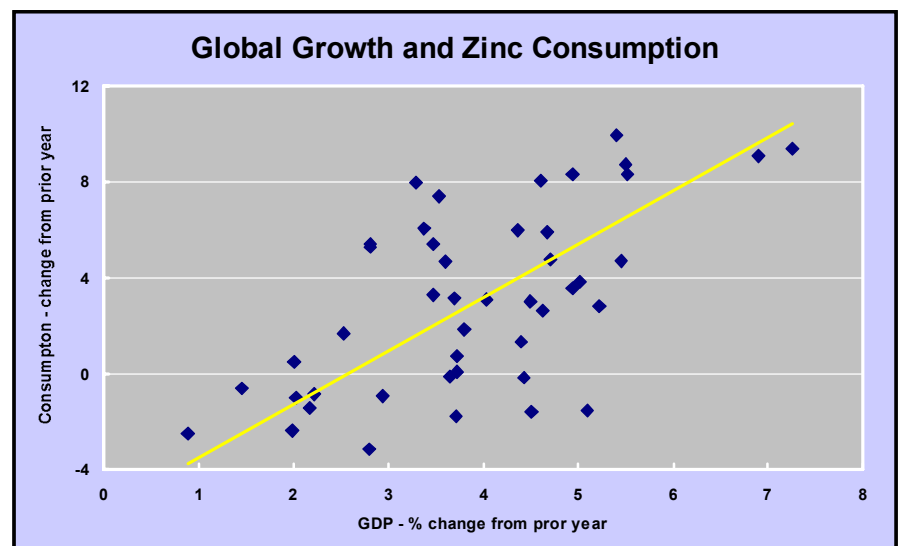
The **chart at the top right** depicts in the traditional fashion the connection between raw material consumption and economic growth over time.



The blue bars show changes in zinc consumption from year to year. The yellow line shows global economic growth rates. This way of looking at the data highlights the historical fluctuations in growth and their conspicuous absence in the past seven years.

The **second chart below** is another way of highlighting the connection between usage and growth. It shows the relationship between zinc consumption growth on the vertical axis and global GDP growth on the horizontal axis.

This is the relationship most would expect to see: the higher the rate of GDP growth, the higher the growth in consumption tends to be. Metal consumption growth of 3-4% a year, for example, is generally associated with global growth of 4-5%. Over the past 100 years, as well as for the past 25 years, zinc mine output has grown at around 3% a year, also suggesting that 4-5% annual global growth would be needed to keep the market roughly in balance over the longer term.





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However, there are two important modifications to this conclusion:

1. the data displayed in the first two charts also show that GDP growth rates below about 3% generate no increase in consumption. We need growth to stay above this minimum level to be at all confident that raw material usage can continue to grow; and
2. the momentum of growth matters greatly. That is, whatever the rate of growth, whether it is rising or falling, is also critically important. The distinction here is between speed and acceleration. Other things being the same, an accelerating economy is better for raw material consumption than one running at an unchanging pace.

The **third chart**, which illustrates the connection between zinc consumption and the momentum of activity, takes up this second point.

Again, the vertical axis shows annual movements in metal consumption. The horizontal axis, in this case, shows changes in the rate of GDP growth. In this context, two successive years of 5% growth, for example, show up as a zero change. Acceleration in the rate of growth from 2%, say, to 5% shows up as a three percentage point upward movement.

On average, across the history reviewed here, there would be a high probability of a 1-2 percentage point acceleration in growth, bringing with it a 5% gain in zinc usage. Momentum has clearly had an important impact on consumption outcomes.

This relationship offers some important guideposts for 2008. Suggesting a 1.2 percentage point slowdown in growth implies a substantial risk that consumption will not increase over the coming year, based on the history displayed in the third chart. There are several reasons why this should be so.

For much of the world, the largest component of GDP is consumption. This also tends to be its most stable component.

Relatively weak economic activity is often associated with large absolute falls in investment spending. Almost by definition, investment spending is far more capital intensive than consumption spending, using a disproportionate quantity of raw materials. For similar reasons working in the other direction, raw material intensive investment spending will also grow more rapidly than the economy as a whole as economic conditions improve.

For these reasons, raw material demand is likely to display a strong connection with any acceleration or deceleration in economic activity. As in the past, this could be the catalyst for the re-emergence of a cycle. Raw material supplies cannot normally adapt quickly enough to keep markets in balance in response to these changing conditions. Consequently, inventories accumulate at these first signs of an economic slowdown.

An August 2006 *ATC Digest* article entitled *Commodity Price Cycles: How Long Do They Last?* describes in some detail the relationship between changes in inventories and price movements. For the reasons outlined in that article, even small inventory adjustments can have seemingly disproportionate price effects at this point in the economic cycle.

There are some arguments that the world is a different place and that the size of China and India, for example, make it so.

This risks wishful thinking by focusing too much on absolute size while ignoring the importance of momentum in changing the direction of markets.

Despite the mind boggling scale of China's development plans, it will not contribute any significant momentum to economic growth in 2008. In fact, according to the IMF, its growth will slip from 11.4% to 9.3%.

That said, China is riding a secular uptrend in the quantity of raw material being used for any level of output. This could be enough to offset the decline in usage from other sources.

But "could be" is not necessarily a strong basis for investing.

Despite sometimes strong views being held by competing camps on this question, the evidence is still unclear. One of the points of interest during 2008 and 2009 will be what we learn about this relationship. Is China's current usage pattern influential enough to buck the historical trends reported here, by delivering growth in raw material demand which more than compensates for a slowing global economy?

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Growth Momentum and Zinc Consumption

