A new dawn for wheat prices

Rising incomes in the developing world …

Much has been written on rising incomes of the developing world and the impact this will have on commodities. How rising incomes will boost the consumption of animal proteins and dairy products in particular. In this article, we pay particular attention to China due to its low stock of arable land and rapidly expanding demand for animal fodder. While we note the further stress placed on land and water resources from current government policies to promote biofuels production, these issues remain beyond the scope of this analysis.

… are driving a commodities "super-cycle"…

Given the size of the Chinese population it is not surprising that China is also the second biggest consumer of wheat (behind the EU). But of course, you can't have a large population if you can't feed them, and store some for the lean years, which is why China is the also second biggest producer – again only second to the EU.

… and wheat should be dragged along for the ride.

Except for the drought years of the mid 1990s, and again in 2004, China has been net exporter of grains. And as we note elsewhere in this report, prospects for the current Chinese crop have improved pointing to 2009/10 wheat stocks returning to 2003 levels. But even this increase leaves Chinese stocks about a third lower than where they were in 1999/00. With major exporters' stocks set to be just a touch lower than 1999/00 levels, the most significant contribution in the recent rise in global stocks has been from other nations. These predominately importing nations appear to behaving rationally building inventories, which are now some 35% larger than in 1999/00, as wheat prices fell from the record highs.

Chinese grain production is already showing signs of stress …

For at least the near term, global wheat stocks provide a sufficient buffer to hold prices down. But it is worth noting that Chinese imports of wheat and flour are rising again and the nations trade surplus in grains is shrinking. One poor season and China would again be a significant importer of wheat as their current level of stocks are not high compared to recent history. Over time as Chinese demand continues to grow, and its output is constrained by the limits of arable land, China will turn into a net importer of wheat.

and the nation is shifting to becoming a net importer.

Long time readers of this report would be aware that we have been here before. We have previously highlighted 1885 to 1916 and 1935 to 1974 as previous periods where urbanisation, industrialisation and rising incomes led to commodities "super cycles". For wheat, however, these two cycles were startlingly different. In the first to 1916, wheat was in a steady uptrend, with a low in 1894 of US$14.33 bushel (bu) – in today's dollars – and a peak of US$38.15 in 1917. During the Great Depression, wheat hit a low of US$8.48/bu in 1932. To put that in perspective, in 2008 wheat averaged US$8.06/bu. However, the second commodity super cycle did not benefit wheat and it held a steady down trend from 1935 until the start of the 21st century. Even the post war commodity spike (US$25.70/bu in 1947) and the early 1970s commodities boom ($20.37/bu in 1974) could not break this down trend.

But a word of warning from the post WWII super-cycle.

So why was wheat left out of the second "super cycle"? Following WWI agriculture in the developed world rapidly became more industrialised with the replacement of horses with tractors and the introduction of fertilisers and pesticides. This not only opened up new land but it also lifted productivity and improved handling and distribution efficiencies. But you could argue that the real downtrend did not start until post WWII when the Green Revolution started. This was the transformation of agriculture in the developing world due to expansion of agricultural research, extension (information exchange), and infrastructure which saw global grain production more than double between 1950 and 1984. This allowed food production not only to keep pace with global population growth but outpace rising demand associated with urbanisation and income growth, hence the trend fall in real prices.

Another "green revolution" would boost production and thus suppress prices.

As such, it is not surprising that since 1960 all of all of the increase in global wheat production has come from rising yields. However, since 2000 the trend rate of increase in yield has slowed from 0.04t/ha per year achieved through the 1980s and 1990s to 0.03t/ha. This 0.01t/ha loss may not sound like much but it represents lost grain production of slightly more than 1% per annum. As a result, wheat production trend growth has slowed to just 0.4%pa as the smaller yield increases have been offset by a trend decline in area planted. So if demand lifts, production will struggle to match given current technology. So until there is another Green Revolution, and the widespread adoption of GMOs could be just that, we remain cautiously optimistic about the longer-term outlook. Without an unexpected lift in productivity, real wheat prices could trend toward US$10/bu by 2029.

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Chart 1.

Consumption & production of wheat

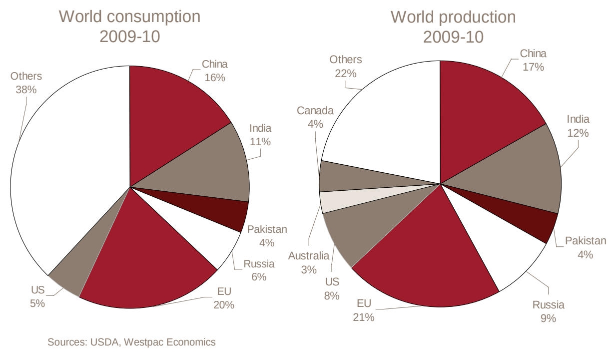

Chart 2.

China's grains surplus is slipping

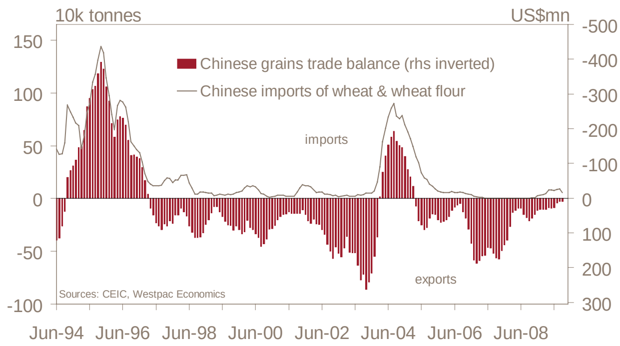

Chart 3.

Chinese wheat stocks are rebuilding

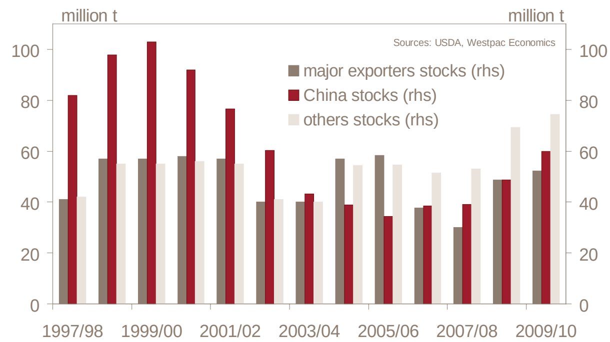

Chart 4.

Wheat missed the second supercycle

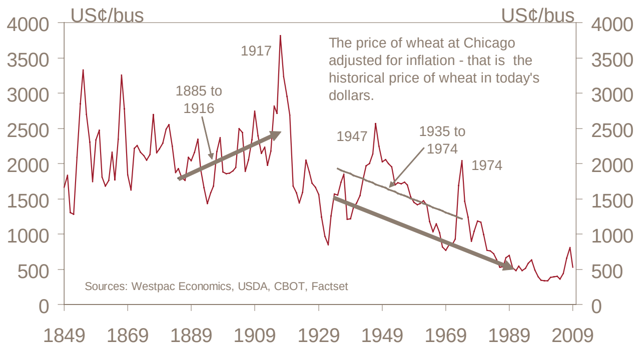

Chart 5.

Trend improvement in yield is slowing

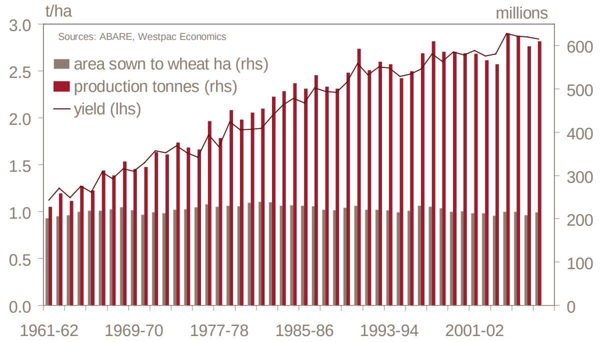

Chart 6.

Without a productivity shock, prices rise