Can you Forecast a Commodity?

Nick Peksa

Reading - 07\textsuperscript{th} December 2010
Mintec Limited

MINTEC LTD was founded in 1982 and provides Commodity Information, Training and Support Services to major companies across a variety of industries and governmental organisations.

British company with headquarters located near London,
Independent company,
Main client base in Europe, US, Australia and Asia.

Servicing:
Retailers, Food Manufacturers, Governmental organizations and non-food manufacturers.
Uncertain times in commodities

In the last 2 years the global commodity markets have seen some massive movements as a result of speculation and demand changes, all topped off with the underlying global economic uncertainty.

What has caused this and how can this help us?

• Can we predict the future?
• Understanding speculation
• Using information to your advantage
• Conclusions
## Commodity Price Changes in the Last 12 Months

<table>
<thead>
<tr>
<th>Food</th>
<th>Non-food</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coconut Oil Rotterdam NL</td>
<td>Cotton ICE NY +83%</td>
</tr>
<tr>
<td>Potato Market EU</td>
<td>Tin LME +74%</td>
</tr>
<tr>
<td>Barley Malt UK</td>
<td>Sulphur World +62%</td>
</tr>
<tr>
<td>Wheat Milling MATIF</td>
<td>Natural Gas Bacton EU +54%</td>
</tr>
<tr>
<td>Apricot Dried TR</td>
<td>Kraftliner EU +42%</td>
</tr>
<tr>
<td>Cocoa Powder London</td>
<td>Fluting EU +39%</td>
</tr>
<tr>
<td>Sunflower Oil Rotterdam NL</td>
<td>Nickel LME +38%</td>
</tr>
<tr>
<td>Maize CBOT</td>
<td>Testliner EU +34%</td>
</tr>
<tr>
<td>Desiccated Coconut EU</td>
<td>NBSK Pulp EU +34%</td>
</tr>
<tr>
<td>Vanilla Bourbon EU</td>
<td>Polypropylene LME +32%</td>
</tr>
<tr>
<td>Whole Milk Powder NZ</td>
<td>Steel Coil EU +30%</td>
</tr>
<tr>
<td>Whey powder EU</td>
<td>LDPE EU +29%</td>
</tr>
<tr>
<td>Beef EU</td>
<td>Copper LME +26%</td>
</tr>
<tr>
<td>Olive Oil ES</td>
<td>USD/EUR -7%</td>
</tr>
<tr>
<td>Cocoa Beans LIFFE</td>
<td>Shipping Baltic Capsize -38%</td>
</tr>
<tr>
<td>Tea KE</td>
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<tr>
<td>Tea LK</td>
<td></td>
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<tr>
<td>Eggs NL</td>
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</tbody>
</table>

(Mintec Newsletter – December 2010)
Food inflation in 2008 saw massive increase worldwide – we are heading to the peaks of 2008, in some markets we are breaking new record highs.
6 Step Sourcing for Food Procurement

- Identify and validate business needs
- Safety, Operational, Customer, Consumer

- Collect and categorize data
- Purchases, prices, usage, suppliers, logistics

- Market and Supplier Analysis
- Cost base, Accounts, market dynamics

- Match Business needs with optimum supplier and market

- Audit, evaluate and contract with the right suppliers

- Motivate the supply base to deliver continuous improvement

Source: Jon Campbell – Milk to Molasses CIPS presentation July 7th 2010
The breakdown of Milk

To understand the cost of fresh milk – we need to look at a lot of detail. The farming side is very complex.

But lets not go into technical details!
Interesting links in Milk Market

[Graph showing milk market trends with labels for Butter UK, Cheddar, Milk UK, SMP Europe]
“Prediction is very difficult, especially about the future” – attributed to Niels Bohr (physicist, 1885-1962)

- A question faced by every buyer is “What is going to happen to the price?”
- If we could answer this we would be sunning ourselves right now in the Maldives.
- The only correct answer is: “It will go up, it will go down, or it stay the same.”
- And to try and predict the future CAN BE VERY DANGEROUS!
Drought spices up price of pepper

The price of black pepper jumped by 17 per cent last week as dry weather and international speculators combined to force up the cost.

By Harry Wallop, Consumer Affairs Editor
Published: 3:52PM BST 01 Sep 2009

Experts warned that the price rise could eventually translate to higher prices on supermarket shelves, leaving a spice-lovers with a bitter taste in their mouths.

According to Mintec, commodity analyst, the wholesale price of black pepper increased by 17.4 per cent to $3,210 (£1,574) a tonne on the wholesale market in the past week alone, after climbing more than 30 per cent in recent months.

Nick Pekas at Mintec said dry conditions in the key producing countries of India, Vietnam, and Indonesia had meant this year's crop is likely to be substantially smaller than in previous years. Brazil, meanwhile, has suffered from heavy rain, which has damaged its pepper crop. The world output this year is expected to hit 230,000 tonnes, nearly 4 per cent less than last year.

To make matters worse, demand has picked up strongly after a subdued year in 2008, when the main international buyers, such as food companies, cut back on pepper because of the recession.

Demand is expected to outstrip supply to the tune of 25,000 tonnes. Speculators have noticed this shortfall and started to pile into the market, which is based in India, pushing up the price.

"In my opinion, if the pressure continues with regards to demand and speculators, we could see increases of some 25 to 30 per cent in the next 3 months," warned Mr. Pekas.

The retail price of pepper has remained pretty steady this year, edging up just 1 per cent, according to the spice commodities price index for UK.

However, Mintec warns that if price rises continue in the wholesale market the higher costs could be passed on to consumers later this year.

Mintec did point out that the price remained at nearly half its peak of $8,000 a tonne, which it reached 12 years ago.

The exorbitant price of pepper during much of the Middle Ages was one of the key factors which led to the Portuguese to seek out a sea route to India.
Can you forecast the price of a commodity?
Can you forecast the price of a commodity?

The result

- My mother bought a large volume of pepper!
- .....the market did not climb as much as forecast (guessed)
- .....she still has it!
However shipping containers increased in price by 35%.
The current price of Black Pepper

Data gain Information Service

USD/MT

Black Pepper Index


Index

Base index Sep 2010 = 100%

Total increase to date 60%
So what other methods are there of forecasting?

Astrology?
Alternative methods of forecasting

**Astrology News: Sugar Markets**

Is the price of Sugar connected with planets in Libra?

![Graph showing the price of Sugar with annotations for key events and planets in Libra.](image-url)
Can you forecast the price of a commodity?

**Pattern in 2009-2010:** On October 29th 2009 Saturn leaves Virgo and enters Libra. The same pattern of an initial rise in the price of sugar prior to the Libra ingress is again occurring. As it moves closer Saturn starts to form a square to Pluto. This aspect is in effect with varying strength up until November 2010. My take on this is some squeeze on the sugar market or a fundamental reformation of production/consumption patterns.

Source: http://www.astrology.co.uk/news/sugarmarket.htm
All was looking good until the world demand for sugar changed and ethanol prices in South America weakened.
Ethanol

Maybe this was caused by the Sun entering Cancer?
Sugar – The forecast was right!

Sugar has risen sharply in price as smaller than anticipated crops this season in Brazil, Europe and Russia have provided solid support and led to increased speculator activity.
Supply and Demand (makes no sense)

Demand more important than supply?

Supply
- Competition – Planting, Production
- Weather
- Stocks of materials
- Speculation

Demand
- Declines in Bio fuels
- Speculation
- Standards of living
Supply and Demand – The speculative way

- Market price is good
  - Buyer sets a contract
  - Price increases as supply is reduced
  - Seller sees an opportunity + % price increase
  - Market Price Increases
  - Speculator opportunity + % price increase
  - Market Price Increases
  - Two additional market price movements
    - (Even if supply is far greater than demand)
A volcano erupted in the Philippines in 1999. But how far from the coconut crops was the volcano?
Crude oil prices have risen by 94% from the start of 2009, however they still remain well below the levels seen in 2008 – have the speculators moved elsewhere?
Petroleum products include naphtha, an intermediate in the petrochemical industry and kerosene, the jet engine fuel. Liquid petroleum gas (LPG) is used for heating and plastics and is liquefied for storage and transportation.
Name the following world events

- Sri Lanka – December 2004
- Haiti – January 2010
- Pakistan – Summer 2010

What do they all have in common?
Cotton

Cotton has seen a lot of problems in the last 2 years and so has the sourcing strategy of Levis Strauss
Supply – Weather Factors (El Niño)

Supply – Weather factors

El Niño/la Niña can significantly affect crop production in countries around the Pacific Ocean.

Likelihood of El Niño/La Niña occurring in 2008-2012 period is very high.

Canadian ski resorts are already advertising the coming of El Niño.
When fish stocks start to deplete there is potential that the El Niño current, may cause drought in some of the major producing regions for milk products (NZ, AUS). This will have a global effect on all dairy markets.
Conclusions

Overall Speculation is something that has become increasingly difficult to understand in the last few years

- You can’t forecast commodity prices
- Look at price and try and understand supply and demand
- Explore how the commodity you are purchasing effects your business
- .....don’t go on holiday where Levis Strauss are buying their cotton.
Please feel free to ask me any questions.

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