

Living with unpredictable wheat prices

Are wheat prices really becoming more volatile?

Jeremy Cole gets to the heart of the matter.



We all know wheat prices are becoming more volatile. After all, almost every pundit says so. On the demand side, the global population is rising. So too is demand for biofuel. At the same time, stocks are declining, farm input prices are high and weather 'shocks' are depleting production.

But hang on a minute. Is it really so? Are wheat prices really more volatile than ever before? My thanks go to Phil Dawson from Newcastle University, whose recent paper in the *Journal of Agricultural Economics* reveals the truth.

When prices, production and demand becomes more volatile, the demand for stocks increases. This is because higher stocks are required to smooth out supply. So higher volatility leads to higher stocks and higher spot prices.

Farmers tend to gravitate towards increasing hedging of their wheat crop, by financial price risk management, FPRM, (futures and options) or by holding higher physical wheat stock levels. Speculators and

fund managers have greatly increased their use of futures and options since 2007.

With this market 'inefficiency' and prices deviating from their long-term fundamental value, should the government intervene with agri-policy to stabilise prices? Or should there be regulation of the futures markets to stop massive price swings?

Research looking at 19 world spot prices from 1990-2009 showed only weak evidence of increased volatility since 2007 – and none for wheat. Another study found that volatility for 1990-2005 was in reaction to global macro-economic factors, while volatility for 2006-2009 was more a reaction to commodity-specific factors. For wheat, stock levels were a 'significant' factor.

What is the effect of speculation on volatility? Many feel that speculators manipulate the markets. It is suggested that speculators fall into two categories: ration speculators trade on fundamentals which tend to stabilise and reduce volatility. But irrational and erratic speculators can cause markets to deviate from the long-term norm and so increase volatility.

When the herd mentality kicks in – such as when markets rise or fall sharply – prices can easily move away from norms until positions are liquidated and normality returns. Yet some research has shown no evidence of a speculator-led bubble in the 2000-2009 US wheat or corn markets.

The results of Phil Dawson's paper showed that volatility increased significantly from June 2007, with daily volatility more than doubling from 1% to 2.6% – supporting the theory that information (in this case the poor harvest) increased volatility.

The futures price significantly determines volatility. A 1% increase in the futures price

increases volatility by 0.04%. Volatility is stable and highly persistent and the 'half life' of a volatility shock is 18 trading days. The increase in volatility since June 2007 has not been short-lived.

The implications to farmers are that higher price risk should lead to better FPRM, insurance, storage, diversification and collaboration. LIFFE futures prices are more volatile and the volume traded has increased from 62,000 contracts in 2006 to 173,000 contracts in 2011/2.

As the number of contracts is not limited in any way, this increased volume may be explained by the increased need to hedge against increased uncertainty/risk and volatility. It may also be due to the increase in noise trading and herd behaviour.

Increased agri-price volatility has international agri-policy implications. Import tariffs and subsidies, or export quotas and taxes can be used to reduce volatility but they ultimately distort the flow of global trade and production signals – and can lead to increased volatility too.

So it seems volatility is here to stay, despite our best efforts to combat it. In a 2001 paper, agricultural economist Stefan Tangermann said: "These markets will continue to exhibit volatility... and there is no policy against that malady."

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Winning growers drink beer from own barley

Barley merchant Robin Appel has launched a competition to find the best Maris Otter grown in Britain this year – in celebration of the variety's golden jubilee.

This is the 50th year that Maris Otter has been commercially available. But the variety was nearly lost until 1993, when Robin Appel acquired exclusive rights to the variety with Norfolk merchant H. Banham Ltd, eventually buying the Plant Breeders Rights in 2004.

The Maris Otter co-owner is offering as first prize 1,000 Guineas and 500 bottles of beer brewed from the winning farmer's barley. Second prize is a tonne of Maris Otter seed and 250 bottles of a Maris Otter brewed beer. Third prize takes home half a tonne of seed and 100 bottles.

The competition is being split into five areas:

East Anglia, the Midlands, south west, southern counties, and north-east. Judged on farm, the three best crops from each region will be invited to submit harvest samples for a final round of judging at Warminster Maltings, Wiltshire.

Robin Appel said: "Maris Otter is the most famous barley variety in the world. But by the end of the 1980s it was fast dying away. This led a leading brewer and ourselves deciding we needed to intervene with a farmers contract to maintain production."

Today, demand is strong from UK brewers who have seen Maris Otter used across a range of Champion Beers of Britain, as judged by the Campaign for Real Ale. At the same time, demand from US brewers is sky rocketing.

A number of brewers have also initiated contracts with local farmers to grow their Maris Otter barley, creating regional beers in every sense of the word. Woodforde's of Norfolk and Hobsons of Shropshire are both involved in sourcing locally grown Maris Otter malts.

The competition will build on the barley seminars held annually by Robin Appel to encourage appreciation by farmers of the role of their barley in some of Britain's finest brews.



Maris Otter is used across a variety of award-winning ales