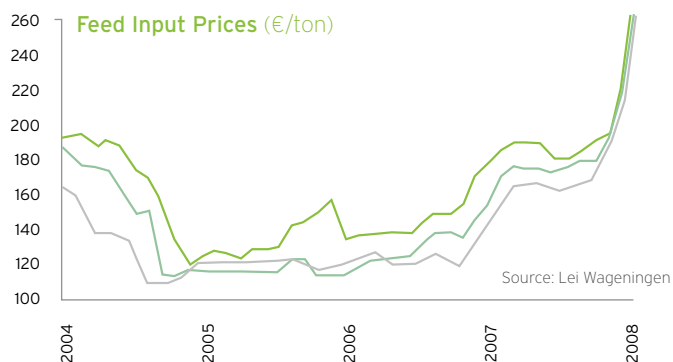


Necessity is the mother of invention

Feed and meat industry development options

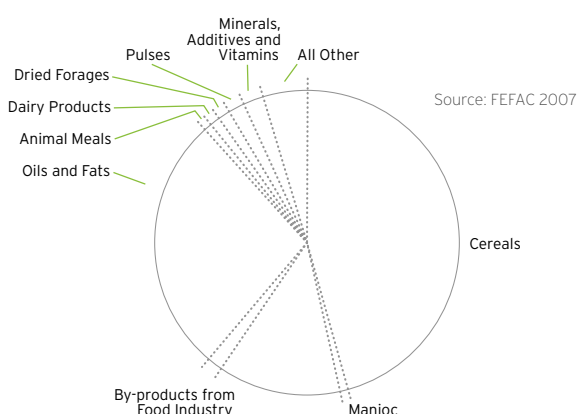
The industry press has been relating tales of meat and feed company woes in a time of unprecedented wheat prices. Agri-business is a long suffering industry, forever at the mercy of Mother Nature, prone to every type of natural disaster from weird weather to endemic disease outbreaks. Periods of volatility are inevitable but volatility in commodity prices in 2007 has been more apparent than ever before and is unlikely to be relieved in the short or even medium term. Diet improvements in Asia, driven by GDP growth, are creating a global increase in demand. In addition the trend towards biofuel production from corn in the US now further intensifies that demand with the effect of knocking supply out of kilter.

Fig 1: Prices of select cereals over the last 12 months (€/ton)



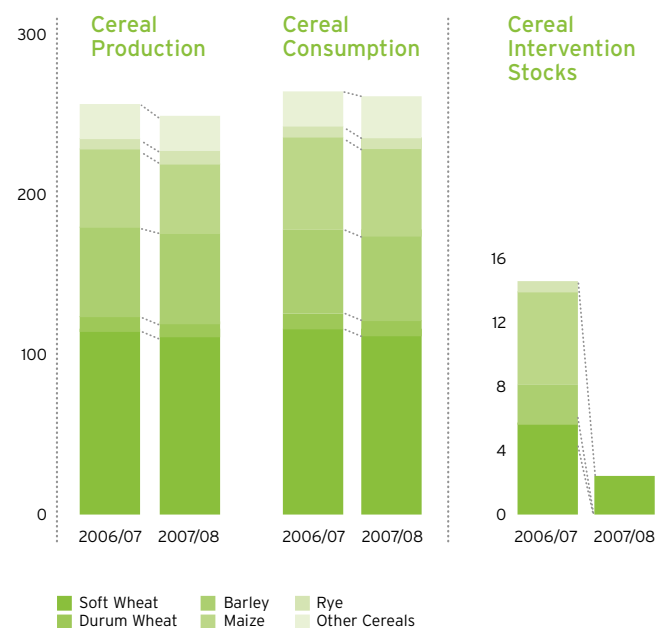
Europe has traditionally been a major producer of cereals and so with these crops representing local supply Europe is dependant on cereals as the major feed constituent. This is particularly the case within the EU 15 bracket as shown in Fig 2 below where cereal consumption into the feed industry represents 45% of the total volume.

Fig 2: EU15 2005 Raw materials for feed



Although weather has certainly been an issue in the production of cereals it has not had the dramatic impact on price that some might expect, nor has consumption risen dramatically due to biofuels as some had also imagined.

Fig 3: Cereal Production, Consumption EU27 and intervention stocks (Mio t)



Intervention stocks, considered the supply safety net of available commodities, have significantly reduced - not through any immediately visible developments in Europe but more as a consequence of the changing global dynamics. Global commodity trade experiencing new demand levels due to BRICs and biofuels.

Since the intervention stocks are so narrow the high prices are unlikely to fall back to 2005 levels at any point during 2007 or the early part of 2008, although the peaks experienced in July and August are unlikely to appear again in this time frame. News of increased acreages of cereals in Germany, France and the UK are appearing and this indicates that supply will increase, assuming the weather behaves. We can therefore forecast a fall in price in comparison to 2007. Volatility will remain but the fall in price in 2008/2009 could be as steep as the increase in 2006/2007.

Supply of grains and oilseeds would be dramatically increased if the regulations of Genetically Modified (GM)

grains and oilseeds were to be adjusted. Europe happily imports meat produced by feeding soybeans and corn grown in regions where the use of GM types is considered standard - however use of feed with traces of GM crops is subject to zero tolerance in Europe.

In recent years the seeds and crop protection industry has worked hard to produce varieties of corn and soybeans with input and output traits such as disease, pesticide, and drought tolerance with the aim of ultimately delivering greater yields. Seed companies compete for market share not through price but via technological differentiation. The varieties with the greatest reliable yields win. The US corn acreage is undergoing a renaissance - with acreage levels reaching all time highs after a long period of flat growth in the 80s and 90s. Market growth for field crop seed producers has always been achieved by offering new technology, and genetic modification is the latest manifestation of this. Currently Monsanto's new corn varieties containing a combination of technologies are winning market share, hence more of the corn produced in the US contains their 'triple stack' event. Monsanto's advertising focuses on reaching out to corn producers by promoting the corn varieties that provide greater yield and corn quality and which are more attractive to the ethanol producer! The feed producer is now taking a back seat to the ethanol producer in the eyes of the corn grower.

In the US much of the corn is now used in ethanol production and even the by-product (DDGS) is still under-utilised as a feed component. Europe is therefore unable to import volumes of by-product - neither DDGS nor maize gluten feed meal - simply as some of the original corn genetics is evident.

With the BRICs and biofuels issue becoming the big news of agriculture we cannot feed and fuel the world without technology. The manipulation of plant genes has been practised happily for many centuries. Imports of corn gluten feed into Europe have fallen dramatically and imports of DDGS are also limited. FEFAC sources quote a fall in supply of 4 million tonnes of maize gluten feed meal and DDGS due to the Europe Union policy makers' failure to keep pace with the world's grain production methods.

With the increased demand on commodities from first generation biofuel industries, as well as the increasingly wealthy populous nations such as China and India, the volatility of commodity supply will ensure little relief in commodity price volatility.

Raw materials are going to remain an issue - so what next?

Much of the meat production industry has suffered negative margins during the wheat price peaks seen during 2007. In order to deliver the meat industry to the other side of the bottom line something needs to change.

Options:

Limber up sourcing

The ability to utilize local food and fuel by-products - everything from DDGS to broken biscuits must be viewed as a potential replacement for any reduction in the use of grains and cereals. The advantages of this are that feed materials are available, local, and cheap, however there are some notes of caution:

The protein quality of these by-products, both in terms of amino acid profile and digestibility, is usually inferior in comparison to traditional feed sources such as cereals. Also they often contain high levels of crude fibre which, unless you are feeding ruminants, renders the feed low in palatability with a negative impact on digestibility and feed intake capacity. The danger of harmful contaminants is also higher; salmonella, mycotoxins, dioxine etc all need to be meticulously tested for, hence the technology prowess is required on the part of the feed compounder.

Feed companies must look to the available local transport, utilising trains or waterways to provide the logistical infrastructure in times of high energy prices.

Those companies that are uncertain of using food industry by-products, and that are also isolated from imports due to the lack of local access, are currently swallowing the short term pain of high prices and, where ever possible, are passing them on to the next stage of the supply chain. Areas of North Eastern France and pockets of Germany have little option but to take the knock and keep using locally produced, expensive cereals in the hope that the prices fall soon.

Maintain technology focus

Some may argue that decreasing the technology frills contained in the black box of feed additives is a path towards decreasing feed costs. Feed additives represent a minor portion of total feed costs. It makes far greater economic sense to reduce use of wheat by one or two percent and utilizing other materials than to cut out additives which represent a small proportion of feed costs in comparison to cereals. Additives such as organic acids, which in the absence of antibiotics have been proven to optimise stomach pH, have the invaluable effect of maximise fattening and improve overall animal health. Mycotoxin binders are extremely important as the levels of mycotoxins in the cereals this year is extremely high following a warm and damp growing season. The amino acids market is undergoing a conversion into a commodity market and is highly necessary to feed manufacturers utilising food industry protein with low methionine and lysine content.

Building leverage

The durability of the meat production industry in Europe has been tested by the trials and tribulations experienced over the last decade. The meat industry in Europe desperately needs to consolidate in order to build the chain leverage as seen held by US meat companies. By consolidating, the meat

industry would increase the ability to pass on increasing raw material prices and would utilize economies of scale. However the disjointed nature of the European Union and the fundamental cultural differences between the major meat producers in each of the many different corners of Europe have acted as barriers to consolidation in the past. Today a huge wave of consolidation is required to make a substantial difference in terms of price leverage with retailers - leverage the large American meat producers already enjoy.

From turnover to profit

The production focus of the feed and meat chain has been on conversion ratios, daily live weight gain and mortality. Adjustments to nutrition can only be seen to produce optimum results when all other environmental factors are also at production optimum i.e. lighting, heating, air quality etc. By focussing on turning over poultry one day faster than before, producers are convinced of a long term improvement to their bottom line. What happens if weight gains were to reduce by one or two percent? We would produce a chicken in 44 days instead of 42 by reducing the percentage content of expensive wheat and replacing the wheat with cheaper, poorer quality food by-products. Mortality figures would improve as less physiological pressure is exerted on an animal to rapidly increase muscle volume. Perhaps we would win a 1 percent increase in the number of birds to slaughter, 2 days longer production would mean two more days of feed but accompanied by 5 percent drop in feed price. The economics of production needs to be the focus not the speed at which the animal can be turned over.

Conclusion

This objective of this piece was to outline the factor that the volatility of the feed supply is now unlikely to subside. Some relief could come from changes to the European Union's import policies on GM, and moreover if this relief is not provided the meat industry has a dim future in Europe. However there are options open to improve profitability and bring the margins back for both feed and meat producer. For further commentary please contact the author, Emma Cardy-Brown.

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