



# MI Prospects



## Analyst's Insight: The crude connection

A few months ago we looked at the possible implications of falling crude oil prices on vegetable oil prices ([read more here](#)). Although the prices of these commodities are linked through biodiesel, **vegetable oil prices were generally slow in following crude oil prices lower** and were able to resist this pressure to a greater extent. Does this mean that the price link between crude oil prices and vegetable oil prices is now much weaker?

Figure 1 plots the correlation between vegetable oil prices and Brent crude prices for each season since 2007/08. According to this analysis, the price correlation between Brent crude and either rapeseed oil or soya oil was the strongest in 2008/09 and the weakest in 2013/14. So far in 2014/15, the correlation between crude oil prices and vegetable oil prices appears to have improved considerably, especially for rapeseed oil. **This suggests that crude oil prices are having a greater influence on vegetable oil prices this season than in recent years.**

While vegetable oil prices have not have fallen at the same dramatic rate as crude oil values, they have followed

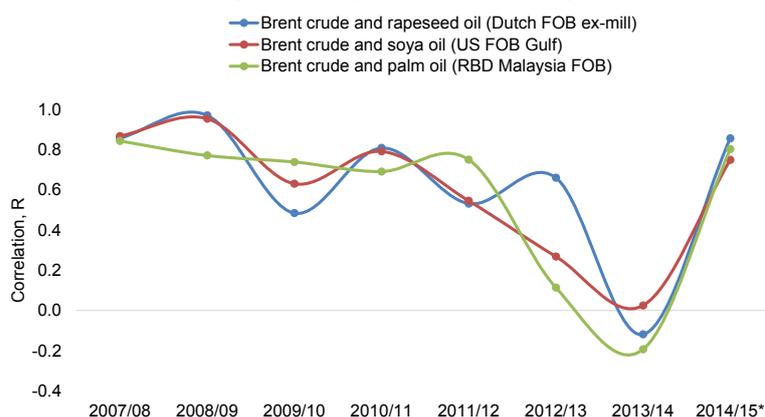
the general price trend. This is because lower crude oil prices made biodiesel production less attractive, which in turn impacted demand for vegetable oils.

Recently, there's been a slight recovery in crude oil values with prices reaching over \$60/barrel, compared with the trough of \$46/barrel in mid-January. This movement has filtered into vegetable oil prices. Taking rapeseed as an example, an upturn in oil prices is likely to have a positive effect on demand, as this will help make crushing margins more favourable ([read more here](#)).

However, in the grand scheme of things, crude oil prices are still the lowest since 2009. Furthermore, a bumper South American soyabean crop is just around the corner from being harvested, which will add to the large US soyabean stocks already present. If crude oil prices do continue to rise and take vegetable oil prices with them, it's unlikely that the speed by which this happens will be enough to offset the bearishness surrounding the overall oilseed complex this season.

**Amandeep Kaur Purewal**

**Figure 1 Crude oil and vegetable oil price correlations by season**



\*July-April

RBD: refined, bleached, deodorised

Source: OilWorld, AHDB/HGCA

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### More meal making crush margins

In recent years, the contribution of the meal component of the soyabean and rapeseed crush margin has increased. This suggests that the oilseed meal market has become more important in helping to determine overall demand for oilseeds.

### Back to futures basics

Futures markets can seem like complex beasts, but a very simple concept underlies them. Understanding the exact nature and role of futures can help in making marketing decisions. This article goes back to basics on how futures markets work and how futures prices relate to actual physical prices.

### UK in for a stocks shock?

The published opening stocks estimates for wheat and maize in Defra's 2014/15 cereals balance sheet could be higher than is actually the case. Defra acknowledged the issue in the commentary accompanying the balance sheet on 26 March and quoted a range for forecasts of availability and closing stocks in the commentary to reflect this.

### Crop outlook generally favourable in North Africa

Crops in most of the cereal growing regions of North Africa received good quantities of rainfall during the winter months. An increase in cereal production is expected in Algeria, Egypt and Morocco, which could lead to a reduction in import requirements for 2015/16.

# More meal making crush margins

*In recent years, the contribution of the meal component of the soyabean and rapeseed crush margin has increased. This suggests that the oilseed meal market has become more important in helping to determine overall demand for oilseeds. Whilst this is a given for the soyabean market, this effect has also impacted rapeseed demand, to some extent.*

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## The crush margin

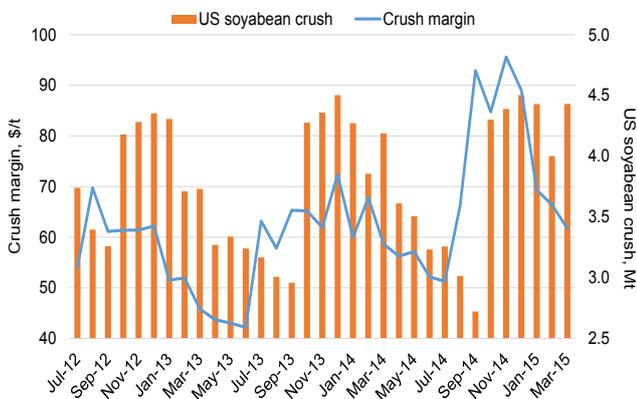
Based on just the relative prices of the seed, oil and meal, the oilseed crush margin is defined as:

(Oil value + Meal value) – Seed value

If oil and meal prices are attractive relative to the seed price, then this provides an incentive to crush the oilseed into its oil and meal products. As a result, this encourages greater demand for the oilseed which is supportive of prices.

Figure 1 illustrates the soyabean crush margin, based on nearby monthly Chicago soyabean, soya oil and soyameal futures prices. US soyabean monthly crush volumes are also plotted and a general pattern is apparent; **higher crush margins stimulate higher levels of crushings.**

**Figure 1 Chicago soyabean crush margin and US soyabean crush**



Source: AHDB/HGCA, NOPA

Although the soyabean crush margin (based on nearby Chicago futures prices only) has moved lower compared with September to December, the average for the season (July-March) is 18% higher year on year. This has mainly been driven by input costs (soyabean price) dropping by more than output values (oil and meal), compared with 2013/14.

The average rapeseed crush margin (based only on physical European seed, oil and meal prices obtained from Oil World), however, is 18%, lower year on year for the July to March period this season. Although the average rapeseed price has been lower, there has also been a decline in the average rapeseed oil price. While seed prices and meal and oil values have all declined

by comparable proportions year on year, as oil tends to drive roughly two thirds of the crush margin, this has led to a similar overall reduction in the crush margin.

## Contributions from oil and meal

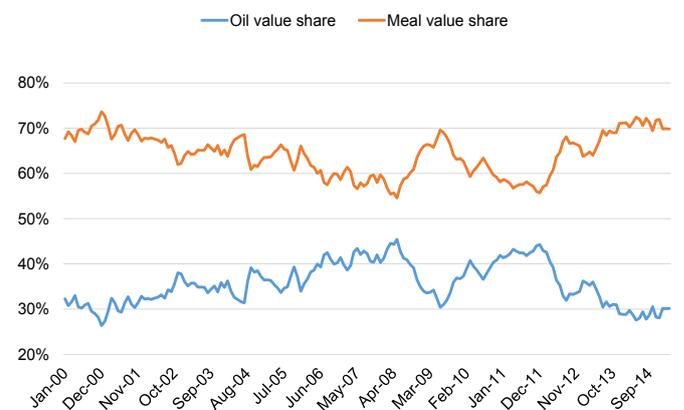
The relative proportion of the oil or meal in the oilseed determines the value of these components, as well as the price. For example, soyabeans contain more meal than oil and so the meal value will have a larger bearing on the overall crush margin. The relatively higher oil content in rapeseed, however, means that the oil value has a greater influence on the overall crush margin compared with rapemeal (see above).

Even though we expect the meal value share to contribute most to the soyabean crush margin (and oil value share to wield the most influence on the rapeseed crush margin), how have these contributions changed, if at all, over the years? **(Please note that the crush margin calculations have been carried out assuming that the average oil and meal content has remained constant over the years shown.)**

Figure 2 shows how the share of the oil and meal value of the soyabean crush margin has changed since the start of the century. Between January 2000 and January 2008, the meal value share declined from around 70% to 60% whilst the oil value share increased by a similar amount. This, to some extent, coincides with the advent of biodiesel, which increased demand for vegetable oils beyond food consumption.

The collapse of crude oil prices in 2008/09 put pressure on vegetable oil prices which led to the recovery of the soyameal value share. Since 2011/12, the soyameal value share of the soyabean crush margin has increased at the expense of the soya oil value share. The average for the current season (Jul-March) so far is 71% compared with 70% a year earlier.

**Figure 2 Soya oil and meal value share of crush margin**



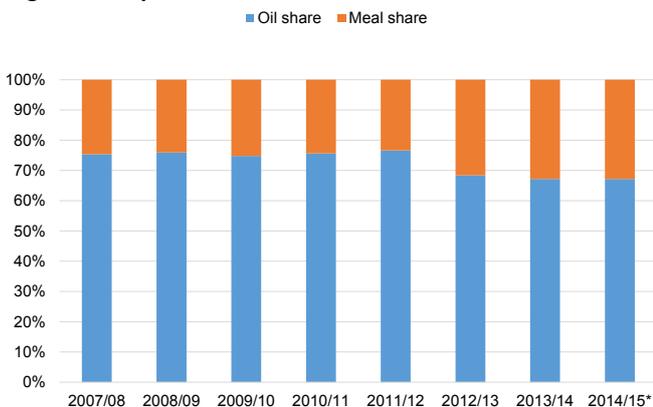
Source: AHDB/HGCA

For rapeseed, as Figure 3 reveals, the rapemeal value share of the crush margin saw a slight step change between 2011/12 and 2013/14, increasing from an average 23% to 32%. So far in 2014/15 (July-March), the

## More meal making crush margins

rapemeal value share of the crush margin is similar to the total 2013/14 season average.

**Figure 3 Rapeseed oil and meal share**



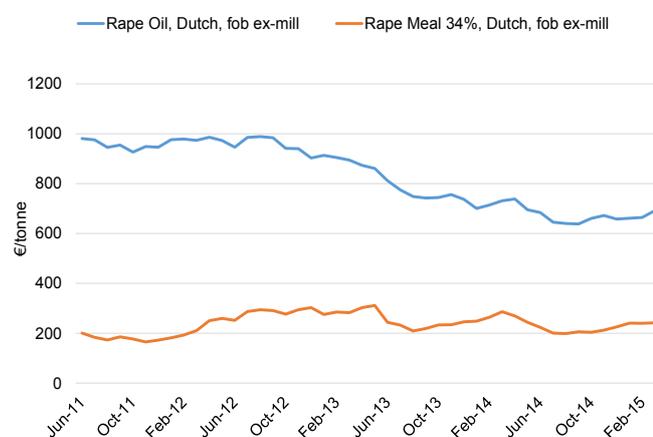
\* Data for July to end March only Source: Derived from Oil World data

What is clear from both Figures 2 and 3 is that **soyameal and rapemeal have increased their contribution to crush margins in recent years, at the expense of oil values.**

The meal market is expected to have a dominating effect on soyabean demand anyway, as most of the oilseed (ca.80%) comprises meal. The interesting effect shown here is how the rapemeal value share of the rapeseed crush margin has increased recently. Figure 4 shows how the fall in rapeseed oil prices over the past few seasons has been more pronounced than for rapemeal prices, which have remained relatively stable.

This trend is also observed for soya oil and soyameal. As soyabeans dominate the global oilseed market and soyameal is the main oil meal by volume, it is likely that the price effects seen in the soya market have influenced the rapeseed complex and in turn, led to the higher contribution of the meal value to the crush margin.

**Figure 4 Rapeseed oil and meal prices**



Source: Oil World

### Closing comments

The contribution of the meal value to soyabean and rapeseed crush margins has increased in recent years.

The soyameal value dominates the soyabean crush margin anyway, due to the higher meal content of soyabeans, but the overall proportion has increased further.

For rapeseed, while the oil value still exerts the greatest influence on the crush margin, the contribution of the meal value has grown. As crush margins, to an extent, determine demand for an oilseed, this means that the meal market has started to gain more importance in the overall oilseed complex.

Looking ahead, Oil World analysts ([www.oilworld.biz/](http://www.oilworld.biz/)) have forecast larger year on year growth in oilmeal production (2.9%) between April 2015 and September 2015, compared with oil production (-0.1%). If demand for meal doesn't match the increase in supplies, then this could put some pressure on meal prices and affect the relative contribution to crush margins. However, regardless of small changes, the soyabean crush margin will always be dominated by the meal share value, while the oil share value will exert the greatest influence on the rapeseed crush margin.

The upshot for oilseed rape, with a lower meal content than soyabeans, is that it could move on to the back foot in terms of crushing returns. If the meal component continues to take crush margin share away from oil, could this be detrimental to oil bonuses that farmers are reliant on to boost crop value?

The catalyst for improving OSR price fortunes likely lies within the dominant oil share through a combination of:

- Bigger premiums for quality oils such as rape and sun oil, which would could be triggered by a supply issue for the respective oilseeds
- A supply issue with lower grade veg oil supplies i.e. soy and/or palm
- Higher crude oil prices to lift the entire oil complex

### Key Points

- Contribution of soyameal and rapemeal values to crush margins has increased since the start of 2012, at the expense of oil values
- Soya oil and rapeseed oil prices have declined at a faster rate over this period compared to meal prices
- Forecasts of higher meal and tighter oil supplies for the next six months could see a further change in overall contributions

# Back to futures basics

*Futures markets can seem like complex beasts, but a very simple concept underlies them. Understanding the exact nature and role of futures can help in making marketing decisions. This article goes back to basics on how futures markets work and how futures prices relate to actual physical prices.*

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## Introduction

Very little grain in the UK is sold directly through futures markets, and very few farming businesses are involved in trading futures directly. Nonetheless, **trade in UK cereals and oilseeds is likely to be linked in some way to futures markets.** Understanding how futures markets relate to one another as well as physical prices can help inform grain marketing decisions. This article is designed to give an overview of the basics behind futures and the role they play in grain and oilseed markets.

The often used shortened term of 'futures' refers to three distinct things – either the futures market, futures contracts or futures prices. The futures market is the marketplace in which trading of futures contracts occurs. The futures price is the price of a futures contract on that market at that point in time.

## The futures market

A futures market is a heavily regulated, transparent and formalised marketplace. Just as trading in the physical wheat market is the buying and selling of wheat, trading in the futures market is the buying and selling of contracts. These contracts represent a specific quantity, quality and location of an underlying commodity for delivery at a specified point in the future. e.g. 100t of feed wheat for Nov-15 delivery. The only thing that changes with a futures contract is the price.

**Figure 1 What a futures market is - Paris wheat futures snapshot**

Delivery	Time (CET)	Last	Vol	Day Vol	Bid Size	Bid	Ask	Ask Size	+/-	Open	High	Low	Settl.	O.I.	Open Interest: Number of open futures contracts
MAY 15	15:13	189.75	2	5,766	260	189.50	189.75	92	-0.25	190.00	190.50	189.25	190.00	103,670	
SEP 15	15:13	189.75	2	1,725	91	189.50	189.75	68	-0.25	189.75	190.25	189.50	190.00	44,806	
DEC 15	15:11	190.00	16	1,141	273	190.00	190.25	141	-0.5	190.50	190.75	190.00	190.50	112,610	
MAR 16	15:13	192.50	2	268	9	192.25	192.75	14	0.5	193.50	193.50	192.50	192.00	11,182	
MAY 16	15:13	194.25	2	24	14	194.00	200.00	2	-0.25	0.00	194.50	194.25	194.50	4,500	
SEP 16	-	-	-	-	1	188.25	198.00	2	-	-	-	-	-	191,75	980
DEC 16	-	-	-	-	2	190.50	196.00	5	-	-	-	-	-	-	216
MAR 17	-	-	-	-	2	188.00	193.50	4	-	-	-	-	-	-	16
MAY 17	-	-	-	-	3	190.00	200.00	6	-	-	-	-	-	-	33
SEP 17	Delivery: The physical delivery month that the futures contract relates to.	-	-	-	2	188.50	196.00	4	-	-	-	-	-	-	2
DEC 17	-	-	-	-	-	-	196.00	1	-	-	-	-	-	-	-
MAR 18	-	-	-	-	-	-	-	-	-	-	-	-	195.00	-	-

The published closing price of the previous day.

The price of a futures contract is determined purely by matching - if one party is willing to pay ('bid') what another wants to sell at ('ask'), a trade is made.

Source: Euronext

With typically more participants, and more trading, than the physical market, most futures markets respond very quickly to new information as participants are able to trade immediately. **The frequency that the market trades at is referred to as liquidity.** Liquidity is a critical success factor for any futures market. With good liquidity, participants can trade with ease, with limited risk of being 'squeezed' and unable to neutralise a bought or sold position.

## What a futures contract is not

A futures contract is not the same as a forward sale – but often gives birth to a forward physical price. A forward sale is a transaction between a specific buyer and seller and is often directly linked to a specific parcel of physical grain.

Futures contracts will rarely result in a physical delivery, instead the original sell or buy transaction is 'neutralised' by an equal buy/sell before the delivery period is reached. That said, futures contracts can be physically delivered against if the seller decides not to buy back the contract. This is an important mechanism as it keeps the futures and physical markets in step with one another. For the UK feed wheat market, the May-15 contract is now entering into its delivery phase. [See a recent Grain Market Daily for more on this.](#)

A futures contract is not a price forecast. It is the current market value of a commodity for delivery at a future point in time.

## Relations to actual prices

The important feature for futures prices is that they **reflect the real price of a known physical commodity** – for example, feed wheat. As a futures contract *can* result in physical delivery, any divergence in futures prices from physical prices can be exploited for profit (either by buying from the futures market or selling on immediately or vice versa). This ensures that the price of a futures contract is tied to the actual value of a physical commodity.

Although futures markets are tied into physical markets, using fixed delivery points means that the value of a commodity in a certain location – such as feed wheat in the north of England or Scotland – will often differ from its value on the futures market. This is referred to as the '**basis**'.

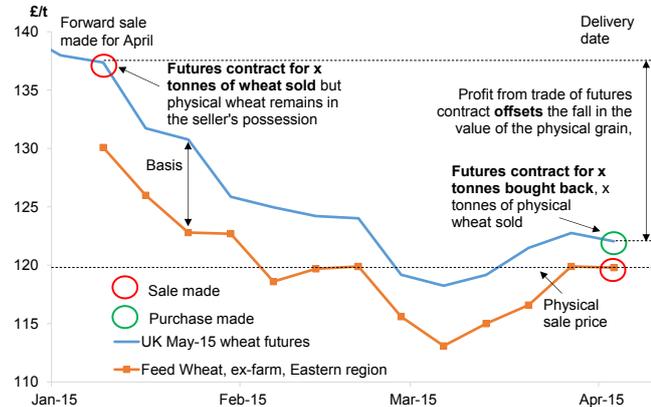
As shown in Figure 2, it is the changes in price on the futures market that affect the forward prices available in physical markets. However, **it is important to understand how the physical price can change relative to the futures price.** For example, if a farmer's ex-farm price is typically £8/t under futures and it is now only £3/t under, this could perhaps indicate a good selling opportunity – in conjunction with broader market information.

# Back to futures basics

## Hedging

Figure 2 shows an example of hedging, the purpose futures contracts are most often used for. The futures contract itself never becomes a physical sale as the futures contract sold is bought back – its role is to account for any price movements, fixing the price of the forward sale.

**Figure 2 Hedging using UK wheat futures**



Source: AHDB/HGCA

A futures contract can be used for hedging more than just the specified product, provided the product being sold and the futures market move in broadly similar directions to protect against the general price moves of the market. For example, as feed barley prices move broadly in line with feed wheat, a UK feed wheat futures contract can be used to protect physical barley prices.

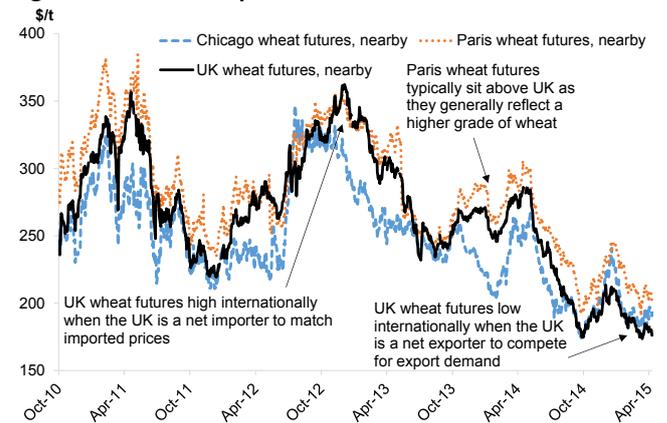
## There's a whole world of futures markets out there

Though forward pricing tends to be on the back of the most local relevant futures, the relationships between world futures markets can offer opportunities and indicate possible price risks.

**Grain and oilseed futures markets around the world tend to follow similar channels on the back of global supply and demand.** Just as the physical price of grain influences the local futures price, the ability to move physical commodities globally binds world futures prices. However, quality and location differences between the markets mean that there are certain 'normal' relationships between futures market prices e.g. the discount of UK feed wheat futures to Paris milling wheat.

When futures markets are outside of these 'normal' relationships, this generally indicates unusual physical market conditions. This is the market encouraging certain commodities to move from one part of the world to another and/or encouraging consumers to use more of one commodity relative to another.

**Figure 3 Relationship of world wheat futures**



Source: Reuters

For example, Figure 3 shows the relationships in world wheat markets over the past five seasons. The relationship between Chicago and Paris wheat is mostly related to geographical differences, with Chicago and Paris futures prices both linked to physical prices in exporting regions.

However, the position of UK wheat futures amongst these is linked to:

- The level of net-trade required to balance the market: net-imports or net-exports
- The quality profile of the UK crop: if there is a surplus, is it mainly feed (so has to be competitive with global maize prices) or does it meet the quality requirements of the export market (so has to compete with French wheat)?

## Closing comments

Futures markets are a key feature of world grain and oilseed markets, allowing buyers and sellers to manage price risks. The price of a futures contract at any point in time reflects the current value of a particular commodity in a particular location at a particular point in time. Although futures contracts are not the same as forward sales, futures contracts often allow the price of a forward sale to be set. For this reason, a small number of key benchmark futures prices are usually monitored, and understanding the relationship and importance of these to the physical crops you have to sell is helpful for making informed marketing decisions.

## Key Points

- A futures market is a transparent, formalised marketplace that allows trading of standardised futures contracts for specific commodities
- Futures contracts guarantee the value of most forward sales, although the futures contract is not the sale itself
- The relationships of world futures markets can offer opportunities and indicate possible price risks

## UK in for a stocks shock?

*The published opening stocks estimates for wheat and maize in Defra's 2014/15 cereals balance sheet could be higher than is actually the case. Defra acknowledged the issue in the commentary accompanying the balance sheet on 26 March and quoted a range for forecasts of availability and closing stocks in the commentary to reflect this. While a review of these figures is underway, it's important that levy payers and market commentators are aware of the situation and its implications.*

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There's a big question mark hanging over the opening stocks figures for wheat and maize in Defra's 2014/15 balance sheets, published on 26 March. **For opening wheat stocks, the current estimate of 2.0Mt could be up to 400Kt higher than is actually the case, while for maize the current estimate of 477Kt may be more than 200Kt higher.** This is based on the discrepancy between the final 2013/14 balance sheet closing stocks estimates and the results of Defra's Stocks Survey published in August 2014.

### So what's caused this?

For the final wheat 2013/14 balance sheet, after total availability, consumption, exports and closing stocks had been factored in, there was still nearly 500Kt of wheat that was unaccounted for or didn't seem to fit anywhere. The majority of this surplus was allocated to the closing stocks figure, making it out of line with the estimate indicated by Defra's stocks survey. As a result, the opening stocks figure for 2014/15 is also affected. A similar scenario played out for the final 2013/14 maize balance sheet; there was around 250Kt of maize left over which wouldn't balance and most of this was placed under closing stocks.

### Implications

#### - On 2014/15 closing stocks

The latest balance sheet is suggesting that there is a lot more wheat and maize around in 2014/15 than is probably the case. This has a direct impact on the supply and demand balance and the carryover that is forecast for the end of the year, as well as 2015/16 opening stocks. The current forecast for wheat surplus that is available to export or carry over into 2015/16 as free stock is 3.9Mt (Figure 1). Cumulative wheat exports until end January 2015 were 1.1Mt, meaning that 2.8Mt was available to export until the end of the season or to carry forward as free stock. However, if the 2014/15 opening stocks figure is out by up to 400Kt, then the amount available to export or carry over as stock could be as low as 2.4Mt. Similarly, the current 2014/15 maize closing stocks estimate of 223Kt (Figure 2) is likely to be

exaggerated due to the incorrect opening stocks figure and could be a lot lower.

Since the 2014/15 March balance sheet was published, further official data has become available. UK trade data (HMR&C) published on 9 April, showed that cumulative wheat exports by end-February 2015 reached 1.34Mt. This lowers the potential amount of wheat that can be exported or carried over into 2015/16 to 2.5Mt, assuming that total demand remains unchanged from the March estimates. However, the latest cereal usage data from Defra, also released on 9 April, showed that total GB compound feed demand in February was around 30Kt (3.6%) higher than what was forecast and total cereal usage was also slightly higher, including wheat and maize. Although data for March is not yet available, the unsettled weather during this month may have also led to higher than expected demand for cereals in animal feed. This may lower the amount of wheat and maize available to export or carryover in 2015/16 even further.

#### -On the market

Defra are reviewing the 2014/15 opening stocks numbers for wheat and maize, with the aim of correcting these by the time the final 2014/15 balance sheet is ready to be published in September. Whilst this review is taking place, **the market needs to be aware that it could be in for a shock if potentially 400Kt of wheat and over 200Kt of maize are removed.** It should be noted however, that estimates may well not alter by the full amounts referred to in this article.

**Given that UK prices follow the global market, it is unlikely that any price movement will be substantial.** If, for instance, a downward correction for the 2014/15 opening stocks figures for wheat and maize occurs when the global market receives fundamentally bearish news, the latter will have a larger influence on prices and is likely to offset any upward price movements that may arise as a result of a stocks correction. Also, if the pound was to strengthen further against the euro, UK prices may have to move down further in order to achieve export competitiveness and this would dominate over any bullish UK stocks news. These **external factors are more likely to dictate price direction** rather than a revision in the 2014/15 wheat and maize opening stocks. In addition, the **UK market is most likely already aware of how tight or heavy the wheat supply situation feels** and so some of the discrepancy is probably already factored into prices. The main audience that any changes may come as a surprise to are likely to be market commentators and those not directly involved in trading/dealing with the grain on a first hand basis.

## UK in for a stocks shock?

### Alternative scenarios

Traditionally, if there's any surplus grain that can't be accounted for, it's allocated to fed-on-farm or stocks, although it's worth noting that the surplus is rarely as large as almost 500Kt for wheat and around 250Kt for maize.

Figures 1 and 2 present some scenarios for how the excess wheat and maize available, when the 2013/14 balance sheet was being finalised, could have been allocated. These scenarios impact the 2014/15 balance sheet estimates, but for simplicity, the only effects shown are for 2014/15 opening stocks, total availability and the surplus available to export or carry over as free stock into 2015/16.

The outcome of these scenarios can be compared with the latest published balance sheet estimates:

- **Defra's published numbers:** 90% of the excess wheat/maize allocated to closing stocks; 10% allocated to fed-on-farm

- **Scenario 1:** 10% of the excess wheat/maize allocated to closing stocks; 90% allocated to fed-on-farm
- **Scenario 2:** 50% of the excess wheat/maize allocated to closing stocks; 50% allocated to fed-on-farm

Taking Scenario 1 as an example, if most of the excess wheat and maize had been allocated to fed-on-farm instead of stocks, 2014/15 opening stocks would have been estimated 381Kt and 211Kt lower, respectively than the published figures in the in the latest balance sheet. Furthermore, total 2013/14 cereal (wheat, barley, maize and oats) demand for animal feed would have been 11.8Mt (Figure 3), 4.4% higher year on year. To put this into context, both the weather conditions and forage availability were markedly improved in 2013/14 compared with the previous season.

**Figure 1 Comparison of published Defra numbers and Scenarios 1 and 2 for wheat**

Wheat (Kt)	Defra numbers		Scenario 1		Scenario 2	
	2013/14	2014/15	2013/14	2014/15	2013/14	2014/15
Opening stocks	2,186	1,959	2,186	1,578	2,186	1,768
Total availability	16,316	19,982	16,316	19,601	16,316	19,791
Usage as animal feed	6,153	6,443	6,529	6,443	6,338	6,443
Total domestic consumption	13,926	14,614	14,247	14,614	14,056	14,614
Commercial end season stocks	1,959	-	1,578	-	1,768	-
Surplus available for either export or free stock	940	3,868	619	3,487	810	3,677

Source: Defra, AHDB/HGCA

**Figure 2 Comparison of published Defra numbers and Scenarios 1 and 2 for maize**

Maize (Kt)	Defra numbers		Scenario 1		Scenario 2	
	2013/ 14	2014/ 15	2013/14	2014/15	2013/14	2014/15
Opening stocks	216	477	216	266	216	373
Total availability	2,610	1,941	2,610	1,730	2,610	1,837
Usage as animal feed	1,262	1,067	1,473	1,067	1,370	1,067
Total domestic consumption	1,930	1,643	2,137	1,643	2,034	1,643
Exportable surplus	203	75	203	75	203	75
Commercial end season stocks	477	223	266	12	373	119

Source: USDA

## UK in for a stocks shock?

**Figure 3 Total cereals (wheat, barley, maize and oats) used in animal feed (Kt)**

		Scenario		
Defra numbers	Defra numbers	1	2	Defra numbers
2012/13	2013/14	2013/14	2013/14	2014/15
11,344	11,255	11,842	11,548	11,190

Source: USDA

Only a simple representation of the various scenarios is shown in Figures 1-3 and it is possible that there could be further repercussions. For example, if either scenarios 1 and 2 are a better reflection of how the excess wheat and maize was used, then this could impact the current 2014/15 estimate of total cereal usage in animal feed. Currently, total cereal usage in animal feed in 2014/15 is estimated 1% lower year on year; a 1% decline in the total feed numbers generated under scenario 1 and 2 would give 11.7Mt and 11.4Mt respectively, which are both higher than the current estimate of 11.2Mt. This could potentially lower the potential 2014/15 carryover for wheat and maize further.

The bottom line is that it is **not clear where the discrepancy or anomaly in the final 2013/14 wheat and maize balance sheet came from**. There's a degree of error associated with each of the main numbers in the balance sheet, for example the production number, trade data and demand data. Out of all the figures comprising the balance sheet, the fed-on-farm number is probably the least reliable as it not based on any survey results and is sometimes determined in the context of the rest of the balance sheet. To some extent, the fed-on-farm figure can act as a balancing item, providing the option to soak up any excess grain which isn't accounted for by other parts of the balance sheet.

The commentary which accompanied the March balance sheet gave a range instead of a single number where figures were impacted by the incorrect opening stocks numbers for wheat and maize. Whilst this approach provides some transparency by highlighting just how much lower the opening stocks, total availability and potential carryover for wheat and maize might be, the size of the range adds a lot of uncertainty into the market. For example, the range given for the amount of wheat available to export or carry over as free stock into 2015/16 is 2.4-2.8Mt- a difference of 430Kt and a significant amount.

### Looking ahead

The current structure of the balance sheet means that the only place for excess wheat or maize to go is closing stocks or fed-on-farm. **Moving forward, it is**

**clear that a more robust and transparent approach is needed.** For example should the production number, trade data and other elements of the balance sheet covered by official data be taken as gospel? Greater scrutiny of these might be required and need to be factored in to business decisions. In addition, the fed-on-farm number is likely to remain a grey area in the short term at least. In cases where it is not clear how an excess or deficit has arisen, the inclusion of a residual, balancing or "unknown" item in the balance sheet might be an alternative option to consider looking ahead.

Until this issue with the current 2014/15 opening stocks figures for wheat and maize is resolved, it is advisable to read the [notes and commentary that accompany the balance sheet](#). **It is likely that the figures presented in the balance sheet are too high and there's less grain around compared with what the balance sheet is stating.** In the interim, the MI team will keep you up to date with any potential developments in the 2014/15 balance sheets. The next balance sheet will be published on 21 May 2015, and the final 2014/15 balance sheet will be published in mid-September 2015.

### Key Points

- Defra's 2014/15 opening stocks figures for wheat and maize are likely to be too high
- This would impact the closing stocks forecasts for 2014/15 and give the wrong idea of how much wheat and maize is around
- The current balance sheet structure is being reviewed by Defra so that this situation is avoided in the future

# Crop outlook generally favourable in North Africa

*Crops in most of the cereal growing regions of North Africa received good quantities of rainfall during the winter months. An increase in cereal production is expected in Algeria, Egypt and Morocco, which could lead to a reduction in import requirements for 2015/16.*

Sarah Nightingale, External contributor  
28 April 2015

## Introduction

The five North African countries of Algeria, Egypt, Libya, Morocco and Tunisia are expected to account for around 15% of global wheat imports and 12% of global barley imports in 2014/15 according to IGC figures.

**While the UK is a relatively minor exporter to North Africa, it is an important destination for UK grain.** UK customs figures show that this region accounted for 25% of total UK wheat exports between July and end-February this season and 20% of total UK barley exports.

With the 2015 cereal crops due to be harvested in forthcoming weeks, this article looks at the prospects for next season's production in Algeria, Egypt, Morocco and Tunisia, and the implications for these countries' import requirements. Libyan cereal production is limited to around 200Kt of wheat and 100kK of barley per year, with little variation, so no analysis is given for this country.

## Algeria

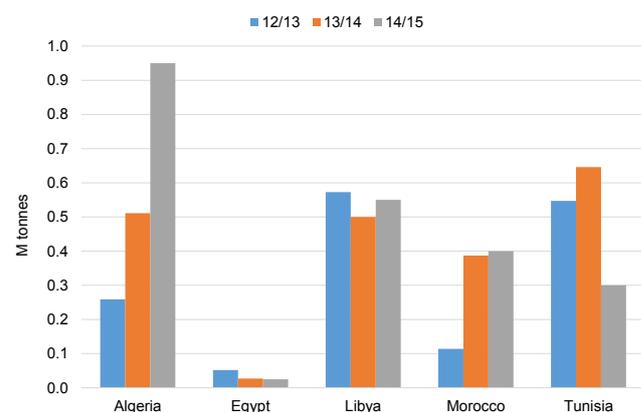
No official estimates for sown areas have yet been published by the Algerian government, but the country had **excellent weather during the sowing season** (November/December). A USDA Agricultural Attaché report, published in early April, puts the wheat harvest area 12% higher than last year at 1.9Mha, and the barley harvest area up 13% to 0.9Mha. The report also forecasts production of wheat and barley up by 0.6Mt and 200Kt to 2.5Mt and 1.5Mt respectively. A significant increase in wheat production to 3.0Mt is also forecast by the International Grains Council (IGC), up from 1.9Mt in 2014/15.

In the latest agro-meteorology bulletin, published by the Algerian Ministry of Agriculture, rainfall is reported to have been adequate up to the end of March, particularly in the coastal regions. **Satellite images show good vegetative development**, which is partly attributable to the higher rainfall over the winter, but is also due to an increase in the use of certified seeds and inputs this season. The EU MARS Bulletin at the end of March, forecast Algerian wheat yields to increase by 14% to 1.68t/ha and barley yields to increase by 32% to 1.56t/ha. Since the beginning of April however, northern Algeria has been dry, which is causing concern for the crops reaching the vital grain filling stage.

On the basis that FAO satellite images indicate little crop stress in Algeria by 15 April, **the implication of the forecast higher cereal yields is for a decline in Algerian**

**import requirements** in 2015/16. Nonetheless, since most of the domestic production is durum wheat, common wheat imports will continue to be required for the bread flour milling industry. A relatively large quantity of barley was imported by Algeria in 2014/15 (Figure 1) but requirements may be lower due to better domestic production and better pasture conditions. Maize imports have been increasing in recent years, and are estimated at around 4.2Mt in 2014/15. A government project to grow maize domestically is under way in the south of the country, but this is still at trial stage.

Figure 1 Imports of barley by country

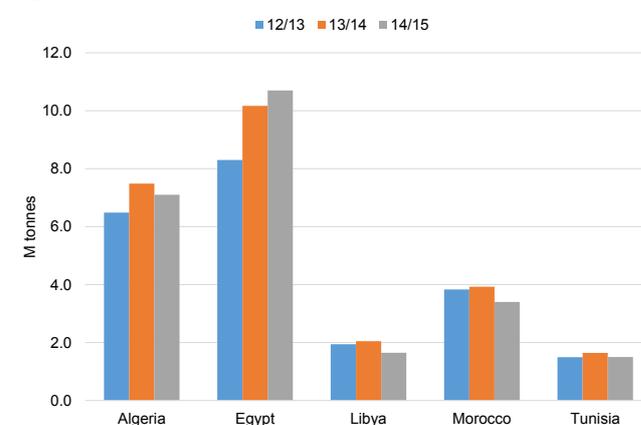


Source: USDA

## Egypt

Sowing of winter cereal crops (wheat and barley) in Egypt was completed in December. An official figure for sown area has not yet been published, but the **area sown to wheat is expected to be similar to last year** at 1.4Mha. The government's purchase price for domestic wheat of EGP 420 per ardeb (around \$366 per tonne) has encouraged wheat production. However, costs are also increasing, most notably due to the recent reduction in energy subsidies that has led to a significant increase in fuel and fertiliser prices.

Figure 2 Imports of wheat by country



Source: USDA

Weather reports suggest that the **crops are in good condition for harvest**, which begins in April, so production is likely to be similar or higher than last

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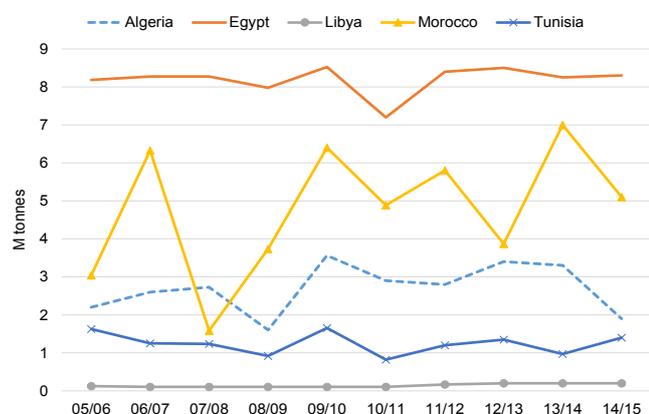
year. In April, the IGC forecast a year-on-year increase in wheat production from 8.5Mt to 9.2Mt. Egypt, which is forecast to import 10.7Mt of wheat in 2014/15 (Figure 2), is the largest wheat importing nation in the world. **Import requirements may be reduced in 2015/16** due to better domestic production.

The **government is also determined to reduce waste** following a report by the Agricultural Research Centre in Egypt. It was estimated that around 1.3Mt of wheat is wasted per year during harvesting, processing, storage, feeding and human consumption. A project is under way to increase and improve grain storage facilities in the country and a change to the bread subsidy system, through the introduction of a smartcard for the provision of food for the needy, is also intended to reduce bread wastage.

### Morocco

Morocco's production is the most variable of all the North African countries (Figure 3). Good rainfall at sowing time in November led to **an increase of cereal sowings** by around 0.5Mha to 5.02Mha. Of this area, 42% is sown with common wheat, 33% with barley and 22% with durum, according to the Ministry of Agriculture.

Figure 3 Wheat production by country



Source: USDA

Rain has fallen sporadically through the growing season, with cumulative rainfall by 13 March up 50% on the previous year. **Wheat and barley were reported to be looking healthy**, with 75% of the area sown reported in "good" condition. The April IGC report forecast a slight increase in wheat production from 5.8Mt in 2014/15 to 6.0Mt in 2015/16, and barley production 400Kt higher year-on-year to 2.1Mt.

On 15 April, a Ministerial statement said that conditions have been generally favourable for the growing of cereals this year, and to ensure a good price for producers it set a reference price of 270 dh per quintal (around \$269 per tonne) for standard quality wheat delivered to mills. The common wheat import tariff was

also raised from 17.5% to 75% from 1 May to the end of October 2015, to aid the marketing and usage of domestic wheat. Wheat imports, which are seen at 3.4Mt in 2014/15, are therefore likely to be limited in forthcoming months.

### Tunisia

Tunisia produced 1.4Mt of wheat and 0.9Mt of barley in 2014/15 (USDA). Of the 1.4Mha intended to be sown with cereals this year, the Ministry of Agriculture put durum wheat sowings at 653Kha, barley sowings at 653Kha, common wheat sowings at 135Kha and triticale sowings at 13Kha.

Areas in the north of the country, accounting for around 60% of cereal production, were reported to have received seasonally average quantities of rainfall by 11 February, but rainfall in the south had been below normal. While some rain fell in March, the first 15 days of April were very dry according to FAO satellite images.

The March EU MARS Bulletin **forecast lower yields for Tunisia than in 2014/15**, putting wheat yield at 1.89 t/ha (2.09 t/ha last year) and barley yield at 1.27 t/ha (1.41 t/ha last year). Import requirements in 2015/16, could therefore be higher than the 300Kt of barley, 0.9Mt of maize and 1.5Mt of wheat forecast to be imported in 2014/15 (USDA).

### Concluding comments

Good rainfall has been reported for many of the cereal growing regions, and forecasts show an increase in cereal production in Algeria, Egypt and Morocco, which could lead to a reduction in import requirements for 2015/16. However, as there have been some wide variations in rainfall across the North African region, final yields and production for 2015/16 are difficult to predict. Further information will be forthcoming in May on the condition of the crops during grain filling, ripening and early harvest.

### Key Points

- Generally good levels of rainfall reported over winter months
- Crops reported to be healthy at heading stage (early April)
- Some concerns about dry conditions in April during grain filling stage in Algeria
- More information will be available shortly as harvest starts in the region