

Agricultural Markets Task Force

Futures Markets, European Fund for Strategic Investments and Financial Instruments

Submission from the Agriculture and Horticulture Development Board (AHDB)

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The AHDB

The Agriculture and Horticulture Development Board (AHDB) is a statutory levy board, funded by farmers, growers and others in the supply chain.

Its' purpose is to equip levy payers with independent, evidence-based information and tools to grow and become more competitive and sustainable.

AHDB raises levies from the meat and livestock sector (cattle, sheep and pigs) in England, horticulture, milk and potato sectors in Great Britain and the cereals and oilseeds sector in the UK.

The AHDB's remit covers 75% of total UK agricultural output.

The funds raised from each commodity sector are used only to the benefit of the sector from which they were raised. Levy is invested in a wide range of activities including R&D, marketing, exports and market intelligence.

Because the levy is statutory, AHDB is classified as a Non-Departmental Public Body and comes under the sponsorship of the Department for Environment, Food and Rural Affairs.

AHDB and volatility

The presence and longer term threat of volatility in agricultural markets and impact on farming incomes is a big risk facing the competitiveness and economic sustainability of the industry. As such a key strategic issue, the AHDB is seeking to offer leadership and catalyse innovation in relation to volatility management. As part of this strategic approach, AHDB launched its Volatility Forum in January 2016.

The objective of the AHDB Volatility Forum is to maintain a long-term focus on developing sustainable volatility management tools. This approach involves looking 'broad and deep' at possible mechanisms across six main themes:

- 1. Forward contracts
- 2. Formula pricing
- 3. Derivatives
- 4. Co-operation and integration
- 5. Strategic business
- 6. Government backed

A key part of the AHDB Volatility Forum will be to improve knowledge exchange between the industry, supply chain, allied industries, policy and academia.

Introduction - time to move the futures debate forward

During a period of volatility, especially low prices, in agricultural commodities the subject of futures markets is often raised. However, the term 'futures' is often used as a catch-all phrase with some limited understanding of what is actually meant.

The theory behind futures markets, despite being quite complex, is often covered but little outcome is often achieved. In reality, there are significant practical and cultural considerations to bear in mind, which we have sought to highlight through this submission.

In the right environment, futures markets are very powerful tools to help producers and consumers manage price risk. However, in the wrong hands they can lead to businesses taking on more risk than they started with and as such regulation is an import aspect of what are ultimately financial products.

To get meaningful outcomes in the area it is important that farmers, their co-ops, physical traders, processors and policy makers have a good grasp of the facts. Only then can informed decisions be made about how to develop the area of futures.

Futures markets in the EU

Futures markets are not anything new to the EU and have been operating in the grain and oilseed markets for many years. As is seen globally, these commodities are best suited to a futures market environment given the bulk and storable nature.

However with de-regulation, notably removal of milk quotas, futures are being seen as one way the industry could actively manage volatility.

There are in fact a number on non-grain and oilseed futures markets in the EU, including skimmed milk powder, butter, potatoes and pigs. However, the challenge isn't about setting them up so much – it's more about usage. History is littered with examples of futures markets e.g. UK feed barley that have fallen by the wayside due to poor uptake (liquidity).

Major practical considerations

To break the futures discussion out of its usual rhetoric cycle, there has to be acknowledgement and strategy put around the significant practical considerations. These are summarised below with more detail in response to the specific questions posed later in the document.

Liquidity i.e. the frequency of trade essentially makes or breaks a futures market. The challenge is that participants want to see good liquidity before they engage with a market so it becomes a chicken and egg cycle. There is perhaps a role for policy to prime liquidity in the early days of a market to give critical mass a chance of establishing.

To be a useful hedge the futures market price must be reflective of the underlying physical commodity. This is achieved through the settlement mechanism which in many cases is through physical delivery protocols toward the end of a specific contract. For example May-16 futures contracts are now entering their delivery phase – although most would have been traded out before physical delivery. As an alternative to physical delivery, expiring contracts can be cash settled against physical price data. To keep the futures market in step with physical prices, this data needs to be extremely robust and may well require mandatory reporting to be successful.

Given the very formal nature of futures markets and necessary regulation, it is relatively difficult for smaller businesses e.g. farm enterprises to gain direct access. However, as is the

case for grain, farmers access indirectly via co-ops, merchants and processors. It is unrealistic to expect that the vast majority of farm businesses will be able to access futures markets directly – it simply isn't viable from a cash flow or required management skills perspective.

Cultural change required if futures markets are to be successful

If non-grain futures are to be successful then there will likely need to be a cultural change within farmer co-ops, traders and processors who will likely be accessing these markets directly. Trading control, accounting and internal risk management are just some of the areas that will need to be addressed to safely access futures. To achieve this, additional management skills will likely need to be procured.

Policy catalysts and constraints

Although futures are largely commercial tools, they require a friendly policy environment to flourish. Outside investment is key to futures markets, bringing much needed liquidity. Undue or uncompetitive regulation versus say the US could hinder market development.

Market management mechanisms, such as intervention safety nets, risk undermining liquidity by removing uncertainty and so the need to commercially manage risk. Specifically relating to intervention in say skimmed milk powder, is there opportunity to innovate?

- Could intervention purchases, if desired be made via a futures market to support liquidity?
- Could intervention infrastructure i.e. stores, be transferred to the futures system to support the development of a delivery mechanism, leading to a robust and transparent settlement mechanism?

As eluded to previously, cash settled futures markets need very robust data to be successful. Mandatory reporting is likely to be important here, but this could be an area to innovate around e.g. is there a role for the European Fund for Strategic Investments (EFSI) within a digital context to transform EU price data reporting?

Futures markets can help protect from short-term price shocks, but longer term resilience remains important

Although potentially very useful in protecting against short-term price shocks, futures markets are far less effective at offering solutions to say prolonged periods of low output price.

For example, the Paris wheat futures currently offer contracts as far forward as March 2018 – just under two years into the future. Although this is extremely useful in managing current price risks for the 2016 and 2017 harvests it does not offer solutions for the longer term i.e. harvest 2018 and beyond. The upshot is that futures markets can offer little assistance to producers to manage a prolonged period of low prices.

To that end, competitiveness and resilience still remain important in managing volatility in a sustainable way.

Answers to the specific questions posed

Futures Markets

1. What are the main problems in the functioning of future markets? How can problems with insufficient liquidity of some existing contracts be overcome (in particular poor take up of dairy and meat futures). How to increase the participation of farmers, commodity users and speculators in futures markets? How to address other obstacles, e.g. the costs of using futures contracts, size of holdings (are futures markets beyond the reach of small holdings?), cultural aspects, perception of futures markets as speculative instruments?

AHDB Response

Key issues facing functioning of futures markets

Liquid futures markets are very powerful tools in helping commodity buyers and sellers manage price risk in the short/medium term. Given the underlying power of these markets, they are set in very formal surroundings to ensure that there is appropriate regulation and transparency in place. In addition, the formality of these markets – through the use of 'margin calls' - protects participants from counterparty risk i.e. if one company goes out of business their exit doesn't send a ripple effect through the market place as it would in the physical market.

Although a very important safety mechanism, margin calls require those using futures to have access to significant amounts of cash to make good their position. For example if a grain co-op sells 1,000t of wheat futures and the market then goes up by a modest €5/t, the co-op is then required to make good their market position with €5,000 cash immediately. This requires good access to finance that smaller businesses might have difficulty with.

Good liquidity i.e. the amount of trade occurring, is they key sign of a successful or failing futures market. Liquidity though can be seen as a 'chicken and egg' scenario with participants more likely to use the market once they see good liquidity in place. Low liquidity presents risk to a participant trying to hedge prices as it means they are far less able to enter and exit a position when they want to. Instead they become more reliant on other participants to provide the counterparty trade.

For young and/or low liquidity futures markets, the key question is how to prime it with liquidity to draw in commercial hedgers and indeed external investors. Despite their bad press, investors are important to the functioning of futures markets as they are a source of liquidity especially when traditional buyers/sellers are not participating.

As well as good liquidity, futures markets need a reliable settlement mechanism. It is this mechanism that any outstanding contracts are settled against on expiration. The settlement mechanism is very important for keeping the futures market in line with the underlying physical market price – thus making it useful for managing physical price risk.

There are two types of settlement mechanism:

1. Physical delivery: Once a futures contract reaches its expiry month then anyone having bought a futures contract is allocated physical tonnage in a

registered warehouse or silo. This is by far the preferred mechanism for settling futures contracts given its clear connection to the physical market place.

2. Cash settlement: Where physical delivery is not feasible e.g. for perishable commodities, outstanding contracts on expiry can be cash settled against price data. This removes the need for physical logistics, but requires extremely robust price data that both hedgers and speculators can have confidence in.

Overcoming insufficient liquidity and increasing participation

Just as with managing volatility, there is no one solution to bolstering liquidity in futures markets.

Any specific futures market needs to be appealing to a critical mass of potential users i.e. it needs to be fairly generic but relative to other commodities. For example German milling wheat can be hedged using Paris futures. On the flipside though, the futures market in question needs to have a quality specification attached to it, so market participants are clear about the basis of the underlying commodity and are able to clearly judge how it relates to what they are physically trading. Over recent years we have seen the advent of some increasingly specific futures markets e.g. EU malting barley that have been unable to appeal to a broad enough market and so have suffered from poor liquidity.

Liquidity in futures markets can also depend on the physical characteristics of the underlying market. For example the strength of futures markets in grain, could be attributed to: Global bulk scale, generic pricing at the feed / basic quality level and storability.

At any one time, futures markets will have a set number of contract months available to trade. By strategically consolidating some of these contract months, liquidity can be concentrated into the most important positions. For example, as at 4 May 2016 EEX Skimmed Milk Powder (SMP) Futures had 19 contract months open to trade – one for every single month from May-16 through to Nov-17. Alternatively, this futures market could cover the same time span with just 10 contract months by spacing them every third month rather than every month. This is essentially what grain futures markets do, which enjoy much better liquidity. This approach would concentrate current liquidity into key months, attracting more liquidity and would unlikely harm price discovery in the intervening months as that becomes a commercial calculation based on the cost of storing SMP.

Another way of supporting liquidity is to review the size of contracts to match market need. For example, it is thought in some quarters that if the size of the UK feed wheat futures contract was reduced from 100t to 50t – in line with Paris futures contracts – then liquidity may benefit.

There could be a role for policy in providing an initial catalyst in generating liquidity in specific futures markets – as opposed to being a constant incentive, which could become distortive to the market. This could take the form of:

- Credit support for new participants e.g. coops / producer organisations
- Tax incentives for the first x number of trades
- Providing initial infrastructure for settlement mechanism e.g. could the EU SMP intervention system be morphed into a physical delivery mechanism for a futures market

Mandatory price reporting to inform a robust cash settlement process giving users confidence to participate

As discussed previously, the formality of futures markets requires participants to make good their positions with cash as well as a level of financial regulation. In addition, a level of internal regulation is required i.e. it is likely to require significant management resource. As such for relatively small businesses e.g. typical farms, it is difficult to gain or indeed justify the cost of accessing futures markets directly. However, as we see in the grain sector, farmers are using these markets indirectly via merchants / co-ops which are able to amalgamate volume and justify the costs of accessing futures.

As such, it is unlikely that there will be any real direct increase in the number of farmers directly using futures. However in evolving sectors such as dairy, the role of say co-ops is changing. Traditionally, the role of co-ops was to add and capture as much value as possible for the farmer members. Now though, co-ops are being increasingly looked upon to help mitigate the exposure of its members to volatility. If co-ops are to fulfil this role and futures markets become a viable option to do this; then co-ops will need to acquire the management capabilities and indeed risk management culture required to access futures markets.

Similarly to co-ops, producer organisations (POs) may also have a role to help the industry manage risk. The initial objective behind POs is to improve the negotiating position of farmers in the food chain. However without the ability (and indeed policy environment) to access tools such as futures markets, the ability of POs to manage risk on behalf of farmers will be limited.

Other obstacles facing futures markets

Anecdotally, some within the agricultural industries associate futures markets with risk rather than risk management. On a similar theme, and because futures markets require an element of external investment, the public perception of futures markets is also likely to be poor. Given that we are dealing with food commodities, there is likely to be an element of corporate cautiousness amongst investors – who may not want to be associated with periods of increasing food prices.

Within the grains and oilseeds sector, where futures markets are widely used, there is a relatively diverse number of buyers and sellers: merchants, co-ops, processors and some agri-businesses. However, in say the dairy industry, there are anecdotally fewer participants and so a narrower range of buyers and sellers to 'make the market'. This could well be an issue facing the proliferation of a futures market. Even in the grain sector, ongoing consolidation is seen as a threat to liquidity in futures markets.

2. Is there a need to develop new futures contracts for other products than those currently existing? What are the obstacles towards developing new futures contracts and what the reasons for the unsuccessful introduction of new contracts in Europe; e.g. durum wheat contract in Italy, citrus contracts in Spain?

AHDB Response

In theory there is scope to create futures markets in many different commodities. However, in practice many of these would likely fail to achieve sufficient uptake. As alluded to previously a futures market has to appeal to a wide enough market place to get sufficient liquidity and buy in. The examples set out in the above question likely fall into this camp of being too specific. In the case of durum wheat it would probably be more viable to establish physical contracts at premium levels to Paris wheat futures, which would offer an element of price risk management.

In terms of new or developing existing futures markets, there are options to consider, including:

- Urea fertiliser: Urea is a very generic commodity used by farmers all over the world. It is surprising that a deeply liquid futures market hasn't developed for this commodity not even in the US, so it might be useful to investigate why. On 10 May, Euronext announced that it plans to launch a nitrogen fertiliser futures contract in autumn 2016.
- Sugar: with the de-regulation of the EU sugar industry on the horizon, this could be an interesting area for the EU. Globally, sugar futures markets are well developed. *Euronext plan to launch a physically deliverable white sugar contract in autumn 2016.*

3. What role can futures markets play in price transparency?

AHDB Response

Futures markets that use a physical delivery mechanism e.g. grain are very useful in providing market transparency.

However, there is a risk that this transparency is taken for granted. For example a number of commercial contracts are priced using the futures price without a futures transaction occurring. The risk here is that the market then becomes open to unintended manipulation – especially when liquidity is low. To illustrate the point let's consider a grain buyer that has agreed to purchase 5,000t of grain from farmers based on the futures price as at 1 November. Come 1 November, liquidity on the futures market is quite low with just 600t trading. In essence the trading of 600t is setting the price of 5,000t and if something was to influence to trading of the 600t e.g. distressed buyer / seller than it would have knock-on implications.

For futures markets that use cash settled mechanisms they are in fact reliant on transparency as opposed to creating it. This is a real challenge facing the development on non-grain and oilseed futures markets that are dealing with more perishable commodities e.g. dairy where physical delivery might be perceived to be too challenging.

4. What is the impact of market intervention measures on developing futures contracts (measures providing for a substitute method of risk reduction)?

AHDB Response

Although the EU market place in agriculture is moving ever closer to free market economics, there are still hints of market management in place, which can be damaging to the development of instruments such as futures markets. To illustrate this, let's consider the role of intervention – essentially to absorb surpluses. These surplus stocks, owned by the EU Commission, are then released during periods of shortage. Figure 1 looks at how the same surplus situation is managed by purely a free market with price transparency coming from a futures market.



In a surplus year, prices in the spot market are forced to discount relative to the forward price for say the following season. The disparity or 'carry' between the spot and forward price creates a commercial incentive for participants to:

- 1. Buy commodity from the spot market
- 2. Place it into storage, and
- 3. Sell forward via the futures market to secure the margin between the spot and forward price.

This is essentially the commercial market place mimicking a public intervention system, which both requires and drives liquidity in futures markets. This is essentially what has been happening in the UK and indeed broader EU grain markets over the last two years.

However, as Figure 2 illustrates, the presence of a public intervention system prevents the market from finding its true level – potentially limiting exports and blocking the commercial storage - reducing the potential for liquidity to grow.



5. Possibilities for policy measures to:

- improve market transparency to offer all market participants wide and equal access to market information before engaging in futures trading;
- o provide reference prices for cash settled futures contracts;
- education encourage the training on using futures contracts in the context of Rural Development programmes;
- include the promotion of futures markets as one of the objectives under operational programmes for producer organisations;
- further encourage the creation of producers organisation (cooperatives) that would be in a better position to use futures markets;
- work on standardisation of products (marketing standards);
- o encourage exchanges to use more frequently market making function.

AHDB Response

As set out in the <u>AHDB submission on transparency</u>, the role of EU level data is changing from informing policy to helping businesses in the food industry make informed decisions. To ensure a level playing field, transparency and open access to data as well as having the skills to interpret it is important. To give participants confidence in cash settled futures contracts, mandatory price reporting is likely to be of critical importance.

Education specifically relating to futures markets should be carefully targeted. As set out previously, the vast majority of farming businesses are unlikely to be able to access futures markets directly – more indirectly via their buyer / co-op. If co-ops (including producer organisations) in many sectors are to move more toward risk management provision, there needs to be sufficient training on implementation and governance. This will likely require many co-ops to go through significant culture change and recruit the required management skills. For some co-ops it might be that the costs of doing this outweigh the benefits even across the amalgamated volume of the farmer members. In this instance it might be more feasible for individual co-ops to pool resources or collectively employ external commercial expertise in the area.

For any futures market having a continuous standard is critical so that everyone involved is clear on what the underlying commodity is. Merely trading an underlying price 'average' is unlikely to provide sufficient transparency and could well provide additional price risk.

European Fund for Strategic Investments (EFSI):

- 1. How can EFSI support strategic investments in the agricultural sector?
- 2. How can a purely investment-driven tool ensure cohesion and even shares of funding opportunities among Member States?
- 3. How can EFSI be complementary to other CAP available funding?

AHDB Response

The EFSI and indeed the European Investment Bank appear to be somewhat of a strategic fit. Agricultural supply chains need to maintain investment to underpin growth, particularly in rural economies, and support competitiveness. Agriculture should meet a number of the broad EFSI objectives, namely: research, innovation, renewable energy (a key potential source of diversified income to help manage volatility) and indeed support for smaller businesses of which there are many within the industry.

With deregulation of its agricultural markets, the EU is becoming more influential in the global market place in many agricultural commodities with events in Europe often shaping world price trends. Supply chain investments are key for long-term competitiveness, but with volatility present it may be challenging to safeguard this investment through traditional means.

Investment could fall into two broad camps. Firstly that of physical infrastructure to improve supply chain efficiency e.g. processing and export capacity. The second fits strategically with the development of the digital market place and could help in building efficient yet transparent market information systems to ensure the most informed decisions are made.

It is fair to say that this is a significant area that warrants further investigation over the medium term. This makes it difficult to draw comparisons to CAP based funding given the next round of reforms over the coming years. That said further CAP reform should try and accommodate alternative sources of strategic investment.

Financial instruments:

- 1. How can Member States be encouraged to shift attention from grants to Financial Instruments in view of strengthening the competitiveness of EU agriculture and agro-food sectors?
- 2. Will a design of EAFRD (fund financing Rural Development measures) Financial Instruments covering loan repayment schemes reflecting market price developments allow farmers to act in line with open market development?

AHDB Response

Member States should be encouraged to think strategically about agricultural industries as a part of food manufacturing and export sectors. Currently, it could be argued that funding is reactive to the latest disaster in the industry with limited insight into return on investment. To combat this, longer term strategic plans need to be put in place that allow the industry to evolve with the market place. To achieve this, Member States should be encouraged to view their agricultural sectors as commercial industries as opposed to a mechanism to support cohesion of rural communities.

It is becoming increasingly evident in the current downturn that the primary issue facing farm businesses is cash flow, with low/no profitability a secondary issue. This is likely to be forcing businesses to maintain high output, despite market signals, in a bid to maintain cash flow to service debt. If loan repayments for instance were correlated to output price then it is more likely that farm businesses would be better able to respond to market signals – which is difficult enough to do given the long lead in times for production.