

Subject: Futures markets

1. DESCRIPTION OF ISSUE

Introduction

Properly functioning futures markets¹ may constitute a corner stone underpinning a market oriented agricultural policy, where most of the traditional market measures have been replaced by direct income support. The increasing number of markets become globalised and exposed to demand or supply shocks originating beyond borders and even across markets. They are potentially important instruments for farmers to address excessive price volatility even though alone they cannot cope with it (they only lessen the impact of unanticipated price volatility).

Futures markets are the result of a natural evolution of forward contracts (contracts between two parties to deliver a certain product at a certain date at an agreed price) which evolved into standardised contracts to avoid the problems associated with counterparty risks and to offer the necessary transparency on the market. In theory, futures markets assimilate information effectively and most distortions should be short-term phenomena (however, in reality and for various reasons, this is not always the case).

Futures markets together with options are part of so-called derivative instruments whose value is determined by the performance of an underlying asset. Futures and options for agricultural products have been long established in the US and more recently in Europe and also exist in some other countries (Brazil, China, India, Japan, South Africa and Thailand).

Agricultural futures markets in Europe exist for a range of commodities (milling wheat, rapeseeds, maize and dairy on Euronext; feed wheat, sugar, coffee, cocoa on ICE; dairy, hogs, piglets and potatoes on EEX). Some are rather successful, in particular for grains, but others have not yet reached sufficient liquidity.

Characteristics of products suitable for developing futures markets

Not all products are suitable for the creation of futures contracts. A product should have characteristics of a tradable commodity, which means, it should:

- be a standardised product of homogenous characteristics;
- have a high share of production available for trade;
- be storable;

¹ A future contract is an agreement to sell/buy a certain quantity of a product at a predetermined price, quality and place and date of delivery. It reflects the expectations of future market prices. A futures contract is traded on exchanges as opposed to a forward contract which is bilateral contract designed to fit individual needs of market participants. Contrary to forward contracts, on the futures markets the physical delivery of goods is an exception (less than 5 percent of futures contracts are actually delivered).

- have a broad, active and competitive cash market (to avoid manipulation of spot prices and abuse of futures market to earn illicit profit);
- not be subject of restrictive movements of supply.

Functions

Futures markets perform several functions: they provide instruments to transfer price risk (hedging²), they facilitate price discovery and in recent years they are increasingly offering commodities as an asset class for financial investors (serve as diversification instrument in investment portfolios). They allow commodity producers, users and traders (so-called commercials which are active in physical commodity business) to lock-in margins and offer necessary stability for forward planning.

Future exchanges are a principal location for price discovery, often providing benchmark prices used by cash markets and in forward contracting.

Prices set on futures markets have an important influence on local spot prices (with the exception of markets protected by border tariffs and isolated from global markets).

A key condition for effective hedging and for efficient futures markets is that at maturity date (on expiry of a contract) the price of a futures contract converges towards the spot price (futures prices should reflect physical market fundamentals). Without convergence market participants will lose confidence in these market instruments.

Sufficient liquidity on the market is another important element for efficient futures markets. Without a sufficient number of counterparties, futures markets simply cannot function and play their role.

A well-functioning futures market increases significantly the price transparency and provides valuable and inexpensive information for all market participants, including those who do not trade on the commodity exchange. They improve information available to market players, including farmers, thus strengthening their competitive position relative to big players, and they enable them to make more efficient production decisions.

The most common reasons why new futures contracts fail

- poorly written contract specifications which do not correspond to the need of sellers and buyers or are not technically sound;
- large firms using market power to boycott the futures market (because future markets offer to all market participant free access to crucial market information: a representative market price);
- contracts fail to attract speculation;
- existing substitute contracts;
- certain local prices are often not strongly correlated to world market prices; consequently local producers or commodity users cannot rely on international futures markets.

² Hedging is the practice of off-setting the price risk inherent in any physical market position by taking an equal but opposite position on a futures market (with the intention to fix the price of a physical commodity at some point in the future).

Obstacles to the functioning of futures markets

- during a period of high volatility, margin calls³ become very high and require significant cash flow;
- producers' expectations that the cash price will be above the futures price when the product is sold (if expectations about cash prices are below the futures prices then market participants have more incentive to use futures contracts);
- transaction costs associated with trading (currently decreasing since electronic trading permits lower trading costs than the traditional open outcry method, but also because competition among exchanges further contributes to decreasing the fee for trading);
- public support programmes that provide substitute methods of risk reduction (e.g. crop revenue insurance for farmers, public price/income support...).

Role of speculators

Apart from commercial players (producers, commodity users, traders...) speculators play an important role in developing futures markets. They transfer the price risk away from producers and commodity users (they take on the risk of future price fluctuations to earn a profit on price movements). Speculators provide market liquidity, which enables commercial hedgers to find counterparts in a relatively costless manner. It is also to be considered that too little non-commercial participation results potentially in large seasonal price swings (however too much non-commercial participation can cause frequent and erratic price changes).

2. HISTORY OF REGULATION/LEGISLATION

Futures contracts are considered as financial instruments in the context of the financial sector regulatory regime and are fully subject to its rules. The financial crisis of 2008 exposed weaknesses in the functioning of financial markets. In a wider context of the G-20 targets "to improve the regulation, functioning, and transparency of financial and commodity markets", the Commission has taken several legislative initiatives to reform the existing regulatory environment. The first finalised initiative was the European Market Infrastructure Regulation (**EMIR**)⁴ followed by the Market Abuse Regulation (**MAR**), the Criminal Sanctions on Market Abuse Directive (**CSMAD**) and finally the revamped Markets in Financial Instruments Directive (**MiFID II**) supplemented by the Markets in Financial Instruments Regulation (**MiFIR**)⁵. The latter are the European rulebooks for regulation of financial markets (equivalent to the US Dodd-Frank Act).

The so-called MiFID II addresses the main weaknesses in the functioning and in the transparency of financial markets. As regards futures markets, the main flaws refer to a lack of convergence, a lack of financial markets transparency, excessive speculation and

³ A margin call is a collateral that the holder of futures contract has to deposit to cover the risks linked to the changing value of the contract.

⁴ Improving the stability of the over-the-counter (OTC) derivative markets.

⁵ Increasing competition and consumer protection in investment services, inter alia, reducing excessive speculation by imposing limits on positions taken on futures markets.

threats posed by new trading techniques, such as High Frequency Trading (HFT) or algorithmic trading, which exacerbates price volatility and potentially triggers sudden large price movements not based on market fundamentals.

DG FISMA is directly responsible for these legislative developments. DG AGRI collaborates closely to ensure that specificities of agricultural markets are taken into consideration.

3. RELEVANT POLICY QUESTIONS

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?
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?
3. What role can futures markets play in price transparency?
4. What is the impact of market intervention measures on developing futures contracts (measures providing for a substitute method of risk reduction)?
5. Possibilities for policy measures:
 - improve market transparency to offer all market participants wide and equal access to market information before engaging in futures trading;
 - 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);
 - encourage exchanges to use more frequently market making function.⁶

⁶ A successful application of that function existed for certain rapeseed futures in the past. Certain commercial traders were designated by exchange to play this function (post at the same moment offers and bids with prices very close to each other offering at any moment to other market participants a counterparty).

4. READING LIST

1. ULYSSES Working Paper (8), WP 6: Policy Responses and Recommendations from ULYSSES project (Final Report), 2015 (<http://www.fp7-ulysses.eu/publications.html>)
2. International commodity benchmarks and producer prices, by Anne Berg, AMIS paper, 2014 ([http://www.amis-outlook.org/fileadmin/user_upload/amis/docs/resources/International Commodity Benchmarks.pdf](http://www.amis-outlook.org/fileadmin/user_upload/amis/docs/resources/International_Commodity_Benchmarks.pdf))
3. Financial instruments and legal frameworks of derivatives markets in EU agriculture current state of play and future perspectives, EP study, 2014 ([http://www.europarl.europa.eu/RegData/etudes/STUD/2014/514008/IPOL_STU\(2014\)514008_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2014/514008/IPOL_STU(2014)514008_EN.pdf))
4. Price formation in commodities markets : financialisation and beyond : report of a CEPS-ECMI Task Force / Ann Berg Diego Valiante ; Christian Egenhofer 1960-; Federico Infelise ; Jonas Teusch. Centre for European Policy Studies (CEPS); European Capital Markets Institute, 2013 (<https://www.ceps.eu/system/files/commodtfr.pdf>)
5. Regulating Agricultural Derivatives Markets / Albert Massot Martí. European Parliament, PE 513.989, 2013, (http://www.europarl.europa.eu/RegData/etudes/divers/join/2013/513989/IPOL-AGRI_DV%282013%29513989_EN.pdf)
6. Presentations from Expert Group on Agricultural Commodity Derivatives and Spot Markets, http://ec.europa.eu/agriculture/cereals/commodity-expert-group/index_en.htm