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ANALYSIS OF MIFID II POSITION DATA ON COMMODITY DERIVATIVES: WHO ARE THE MARKET PARTICIPANTS AND WHAT IS THEIR WEIGHT IN THE MATIF GRAIN DERIVATIVES SEGMENT?

INTRODUCTION

The MiFID II directive introduced limits and specific reporting requirements for positions in commodity derivative instruments in order to prevent market abuse, promote orderly and efficient listing and regulation, and ensure convergence between spot prices and derivative prices. The AMF decided to make good use of its enhanced access to commodity derivatives data and to publish a study of the main commodity derivatives market under its supervision, the Matif (Euronext).

This study aims to improve our understanding of the weight of the various types of end clients in the wheat, corn and rapeseed markets, placing particular emphasis on the distinction between financial operators (investment firms, funds and other financial institutions) and commercial undertakings (notably farmers, storage organisations and industrial firms). The period analysed is from 2018 to 2021 and therefore does not include the Russo-Ukrainian conflict, but the trends noted in recent weeks do not call into question the results of this study, which focuses on positions rather than prices.

This analysis of the new MiFID II data highlights the significant weight of commercial undertakings in the open interest in the commodity derivatives segment of Euronext, since they hold half of the positions - the other half being held by the various types of financial market participant. In the United States, the commercial undertaking category is by comparison far smaller (26%). By making it possible to distinguish between commercial undertakings' hedging activity and non-hedging activity, MiFID II data also sheds new light on these market participants' activity.

Lastly, the study highlights some of the new commodity derivatives regulation system's blind spots and flaws, and in particular, the lack of granularity of the reporting performed by third-country market participants and the imprecision of the European COT report, because it does not make it possible to single out the activity of Commodity Index Traders.

1. Functioning, value added and limitations of the position reporting and publication system

MiFID II introduced a specific position reporting system for commodity derivatives, on the one hand to allow the supervision of compliance with position limits and, on the other, to increase transparency in commodity markets. Article 58 of MiFID II accordingly requires that market members and investment firms disclose to Euronext the positions that they hold in the commodity derivatives listed on the trading venue, the position of their clients, of their clients's clients, and so on through to the end client. These reports, which are centralised by Euronext before being sent to the AMF, enable the venue to perform its checks and publish a weekly report on the positions by category of position holders[1] (similar to the Commitments Of Traders (COT) report established by the CTFC as of 1962).

This report makes the aggregate positions in commodity derivatives held by various categories of market participant public:

- **Investment firms**[2] **or credit institutions.**[3]
- **Investment funds**, be they Undertakings for Collective Investment in Transferable Securities (UCITS)[4] or alternative investment fund managers.
- **Other financial institutions**, including insurance companies and reinsurance companies,[5] and institutions for occupational retirement provision.[6]
  In light of this study, the "other financial institutions" category actually covers mainly non-European financial operators but may include (unidentified) end participants potentially belonging to other categories (see below).

[1] https://live.euronext.com/products/commodities
[2] Defined in Article 4 of Directive 2014/65/EU as "any legal person whose regular occupation or business is the provision of one or more investment services to third parties and/or the performance of one or more investment activities on a professional basis".
[3] Within the meaning of Article 4, paragraph 1, point 1), of Regulation (EU) No. 575/2013.
[4] Within the meaning of Article 2, paragraph 1, point b), of Directive 2009/65/CE.
[5] Within the meaning of Directive 2009/138/CE.
[6] Within the meaning of Directive 2003/41/CE.

- **Commercial undertakings**, a category which is not explicitly defined in MiFID II and which is understood here as covering non-financial entities whose activity is primarily commercial but also all the entities that cannot be classified in the financial categories mentioned above.[7] In the case of the wheat derivatives covered by the study, the category comprises storage organisations (cooperatives or merchants), industrial firms (millers, wheat processors, livestock feed producers) and farmers.

The COT report introduced by MiFID II thus offers unprecedented transparency regarding European commodity derivatives, by highlighting the weight of the various categories of market participant and how this evolves over time.

In some respects, the European COT offers more comprehensive information than the CFTC's COT, by providing an exhaustive view of the positions held by the various categories of participant, whereas the American COT covers only the portion of the positions exceeding the reporting obligation threshold (which provides visibility only on a cumulative total corresponding to 80% of the open interest in the case of the Chicago wheat contract). The European COT can also, in the commercial undertakings category, distinguish between positions held for hedging[8] and non-hedging positions (associated in what follows with the concept of "speculative positions").

However, the European transparency regime suffers from major shortcomings:

- The granularity of the classification used in the European COT is insufficient to be able to distinguish, among funds, between market participants employing beta strategies or passive indexing against long-only benchmarks (such as the S&P GSCI, Bloomberg Commodity Index or ICE BAML Commodity Index) and market participants employing more dynamic alpha strategies (momentum type absolute return strategy, index factoring, carry, or volatility). The singularity of the behaviour and the extremely heavy weight of index funds on the Chicago wheat market, where commodity index traders (CITs) account for 43% of the long position and 25% of the total position, nevertheless seem to point to the interest of separate counting of their positions, even though this category of funds is still small in Europe (4%).
- **The positions reported as belonging to the category of "other financial institutions" (20% of the open interest, see below) would seem to represent a broad blind spot and hence likely to reduce transparency.** This is because, for this category of investors, the total positions are indeed counted but any ultimate holders behind these intermediaries are not identified, because the obligation for a market participant to identify its position and that of its direct clients ends with the last investment firm along an intermediation chain.[9] Thus, whenever the client of another financial institution is a market participant not authorised in Europe (e.g. a financial operator of a third country), the reporting chain is broken. It is therefore probable that an unspecified fraction of the positions appearing as held by the "other financial institutions" category corresponds to positions ultimately held by other categories of market participant, such as commercial undertakings.
- **The COT published by Euronext lacks precision (see below) since there is no obligation for its members to perform classification of end clients.**[10]

2. Analysis of position reporting by category of market participant

To be able to assess the impact of the various types of participant on the positions, the position reports by ultimate holders received each day by the AMF were crossed with Euronext's mapping table providing the category of each holder. This classification data underwent adjustment by the AMF where data was clearly

[7] The COT also provides for a category of "operators subject to compliance obligations by virtue of Directive 2003/87/CE" which applies only in the case of emission quotas and emission quota derivatives and which is not relevant to this note.
[8] Article 7 of the Delegated Regulation of 01/12/16 offers market participants two possible definitions for hedging: a general definition based on risk mitigation, and the other equivalent to the IFRS "hedging contracts".
[9] Indeed, within the meaning of MiFID II, a non-financial company cannot have a client, since the concept of client is defined only in relation to an investment firm.
[10] More specifically, MiFID II requires the weekly publication of a COT showing details of the positions held for each category of entities by the market undertaking but does not require of the market members subject to the obligation of reporting daily positions that they assign a category to their clients.

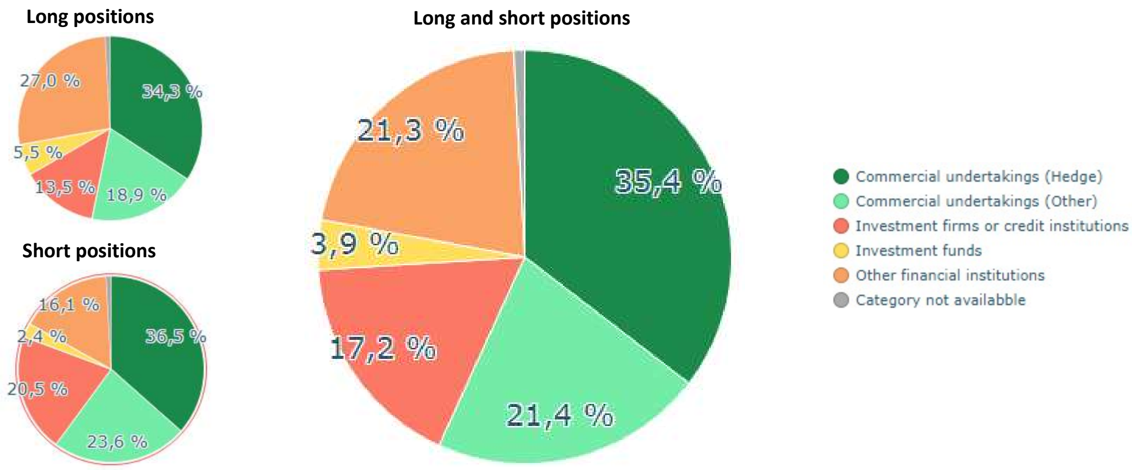
erroneous or missing. The data was also adjusted to eliminate problems of duplicates whenever possible without data loss[11].

The study focuses firstly on the wheat contract given its preponderant weight in terms of positions and trading volumes among the agricultural derivatives traded on the Matif. Certain observations specific to rapeseed and corn contracts are nevertheless noted when, in particular, their positions show significantly different characteristics from those observed for wheat. For a given underlying (i.e. wheat, rapeseed or corn), the positions include those taken directly on futures and those taken on options involving those futures (then valued on a delta equivalent basis, also based on reporting).

2.1. Reported positions on wheat contracts

2.1.a. Breakdown of gross positions among categories of market participant

The following charts show the average breakdown of the positions held by category of market participant, singling out those reported by commercial undertakings as hedging. This average is produced over the entire observation period, i.e. from January 2018 to December 2021, based on the daily percentages held by each category. The three charts below show the long and short positions and the two combined in absolute value, respectively.



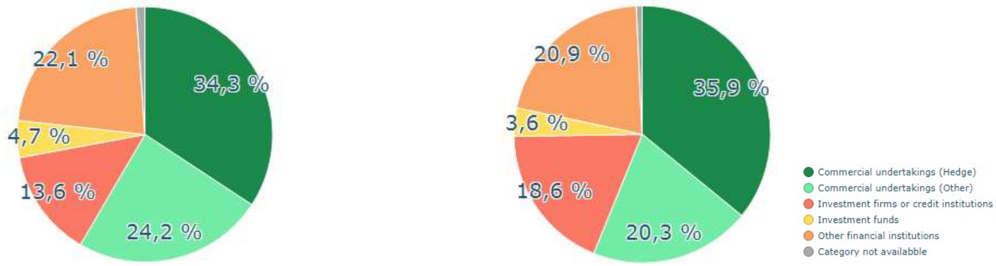
Between 2018 and 2021, **on a daily average, commercial undertakings held 57% of the positions** (53% of long positions and 60% of short positions) **while financial operators held the remaining 43% of positions** (with 17% of the positions held by investment firms, 4% by funds and 21% by other financial institutions).

Note that commercial undertakings, the only category authorised during the period analysed to report a position as a hedge, report 62% of their positions as a hedging activity. This breakdown, performed by the AMF directly based on the reported data, is substantially different from that obtained on the basis of the Euronext COT according to which commercial undertakings apparently hold four fifths of the positions that were able to be assigned. This difference is due to the adjustment performed by the AMF where data is clearly erroneous on the matching file between the ultimate owners and their category provided by Euronext. Works will be done with the exchange to ensure a better data quality.

The analysis by maturity (following charts) shows that commercial undertakings hold 58% of the spot position on wheat on Euronext and 56% of the position over the other months, similar proportions which change relatively little over the period under review.

[11] When a clearing market member holds a position on behalf of a market member client, the two operators have reporting obligations, and this creates reporting redundancies. Moreover, the possibility allowed by Euronext for commercial undertakings to themselves report their positions (in order not to have to disclose to their investment service provider the hedging or non-hedging nature of their market positions) also contributes to this redundancy phenomenon.

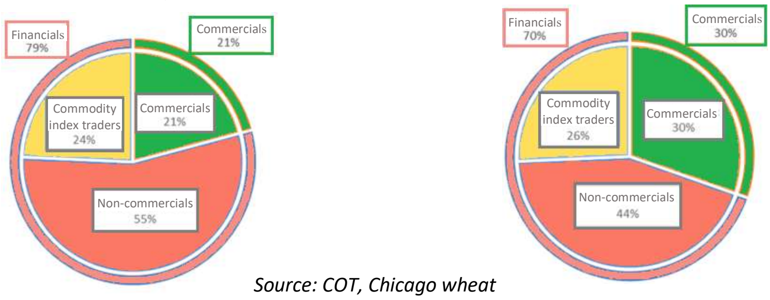
Positions on the first maturity **Positions on other maturities**



This preponderant weight of commercial undertakings in the positions held on the European wheat contract contrasts sharply with the situation on wheat in Chicago where, according to the COTs published by the CFTC (see charts below), commercial undertakings hold 26% of the open interest (21% of the spot position and 30% over the other months) and financial firms hold 74% of the open interest (of which 79% on the spot market and 70% for the other months).

Chicago wheat positions

First maturity **Other maturities**



Source: COT, Chicago wheat

Financial operators are also by far the majority in terms of the number of operators in Chicago (with 1,418 operators[12] versus 366 in Europe), contrary to Euronext where commercial undertakings predominate (see table).

Numbers of entities reporting			
Wheat, Euronext		Wheat, Chicago	
Commercial undertakings	529	Commercial	326
Investment firms	32	Non-commercial	1,356
Other financial institutions	124		
Investment funds	210	Index funds	62
Total	**895**	**Total**	**1,744**

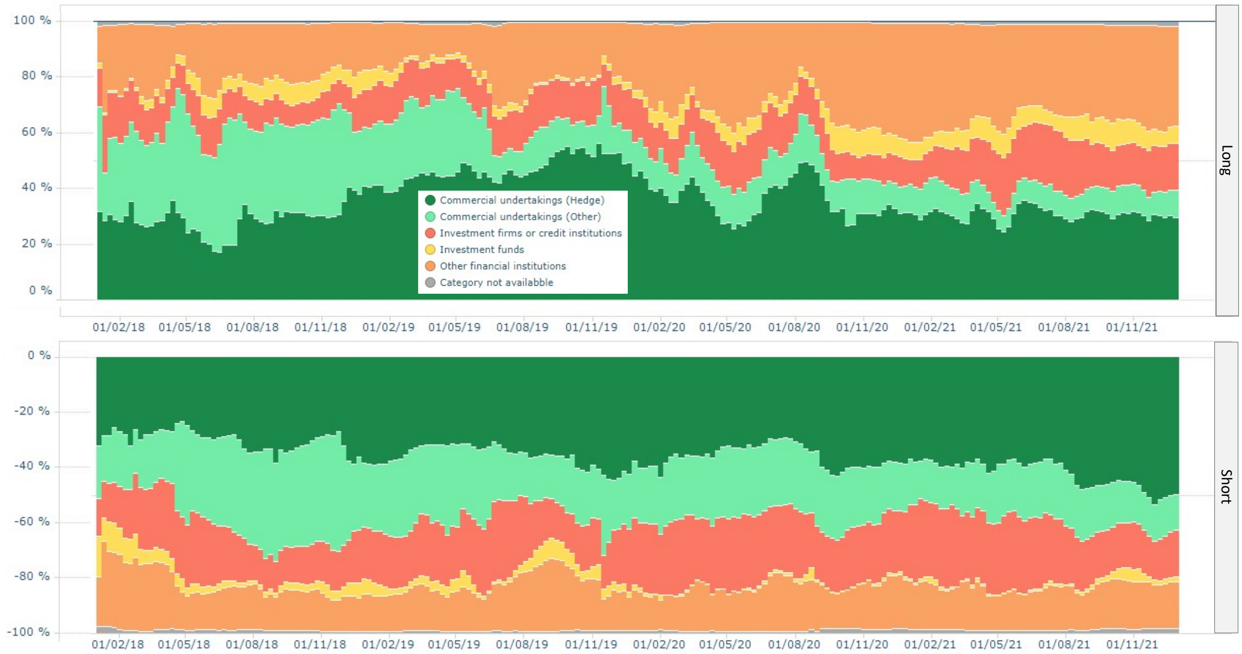
Thus, unlike the situation observed on the Chicago wheat market, commercial undertakings are preponderant in positions on the Euronext wheat contracts, for both near- and long-term maturities.

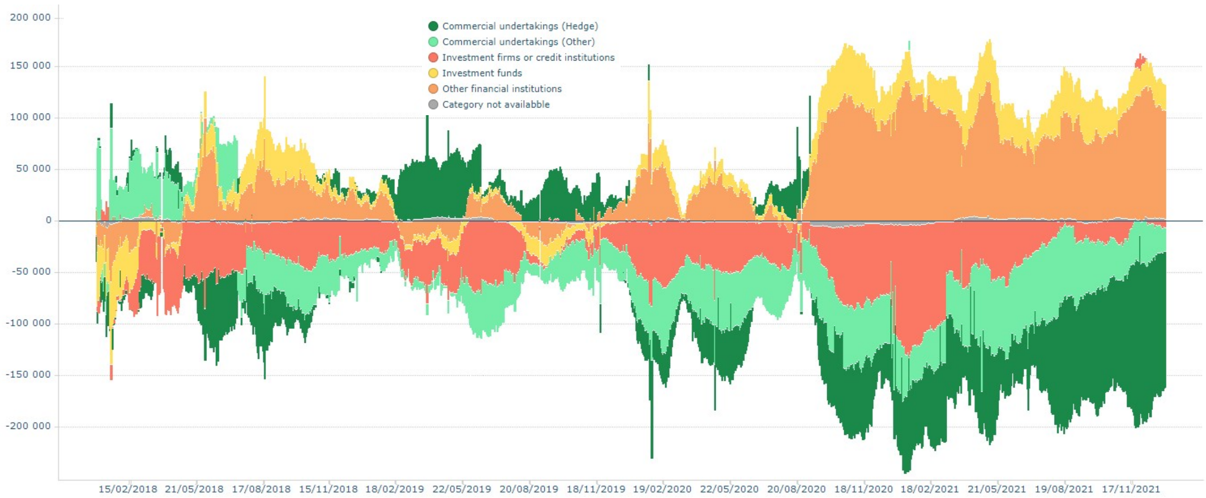
2.1.b. Near- or long-term positioning by category of market participant

The following three charts show the weekly changes, between 2018 and 2021, in the breakdown of reported positions on Matif wheat contracts by category of market participant.

- The first two charts, in percentages, are based on the gross positions, long and short. The total of the long positions (or short positions), which corresponds to the open interest, is shown in an Annex.
- The third chart, meanwhile, nets the short and long positions of each category of market participant.

[12] For the US, these numbers are lower bounds, because only the positions exceeding a threshold are reported (see above).





As is shown on the last graph, commercial undertakings generally have net short positions. This is in line with the hedging activity required by various types of players in the sector. For example, when a storage agency buys commodities from a farmer, in most cases it has not yet found an industrial customer to sell the goods to. Consequently, it must pay the farmer first and introduce a mechanism to hedge against the risk of a change in the price while it finds a customer. The storage agency protects the forward sale via a short position in futures. This position value appreciates and offsets any fall in the value of the goods if the price drops.

Producers face similar challenges for the sale of their future produce, possibly wishing to lock in a good price before the harvest via of a short position in futures.

Whereas the net positions of commercial undertakings, and especially those reported as hedging, showed a certain cyclicality until the 2019/2020 season with an alternation of long and short positions, the 2020/2021 season saw a consolidation of their short positions at a permanently high level which was even still growing for hedging.

Investment firms generally show net short positions. This positioning could reflect activity from swap dealers acting as intermediaries which enables their clients to take a short exposure to the market via a swap, covered by the swap dealers through short positions in futures. This short positioning seemed to fall away in 2021, which coincides with a phase of a sustained rise in wheat prices. This change in positions can also apparently be explained by the more significant presence during this period of investment firms serving non-European clients implementing directional strategies.

Funds generally remain long, as shown by their cumulative net positions, but 42% of their gross positions are short, which indicates that these market participants are not only involved in beta strategies, i.e. indexing against a long-only benchmark, but also in long-short strategies of the relative value type (long an undervalued asset and short an overvalued asset) or trades on the slope of the yield curve for example.

Similarly to investment funds, other financial institutions persistently hold net long positions. This category is structurally more difficult to analyse given its heterogeneity due to the reporting limitations mentioned earlier, notably outside the European Union. This grey area concerning the exact nature of the ultimate owners coming from third countries is all the more problematic in that their positions have increased considerably since the end of 2020.

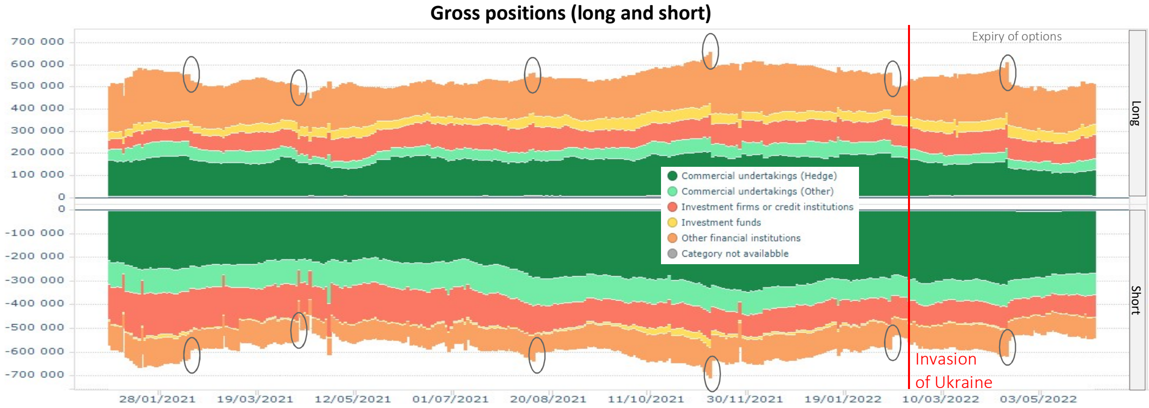
Impact of the Russian-Ukrainian conflict

The invasion of Ukraine by Russia on 24/02/2022 had a profound impact on the grain market, as both protagonists are among the biggest exporters.
Wile prices were already reaching historically high levels, driven by strong demand due to the post-Covid recovery (+20% for the Matif milling wheat in the 12 months preceding the invasion), **the conflict led to a further rise in prices**. In the context of a particularly sensitive balance between supply and demand, prices remain highly volatile and are reacting strongly to the various announcements in the news (suspension of exports by India, drought affecting several producers, discussions on the possible resumption of Ukrainian exports by sea, etc.).
In the face of this volatility, clearing houses have increased their initial margins, requiring holders of futures positions or listed options to raise large amounts of liquid assets. **Has this constraint deterred participants from accessing the market and limited their transactions, in particular their hedges?**

There is little to confirm such fears to date:

- The open interest (OI) continued to increase after the increases in initial margin, and although it fell slightly at the start of May 2022, it has returned to a level similar to that of a year ago.[13]

Gross positions (long and short)



- The proportion of positions held by commercial undertakings did fall after the invasion of Ukraine, especially in the first three weeks, but this share then stabilised at a level also similar to that of a year ago.[14]

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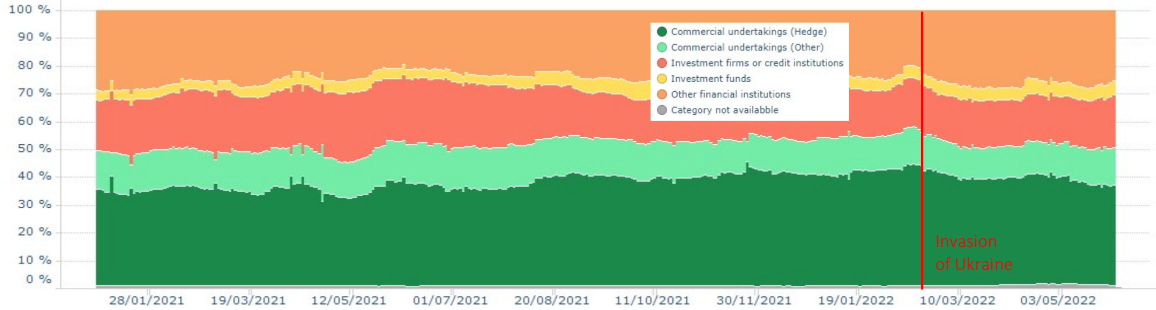
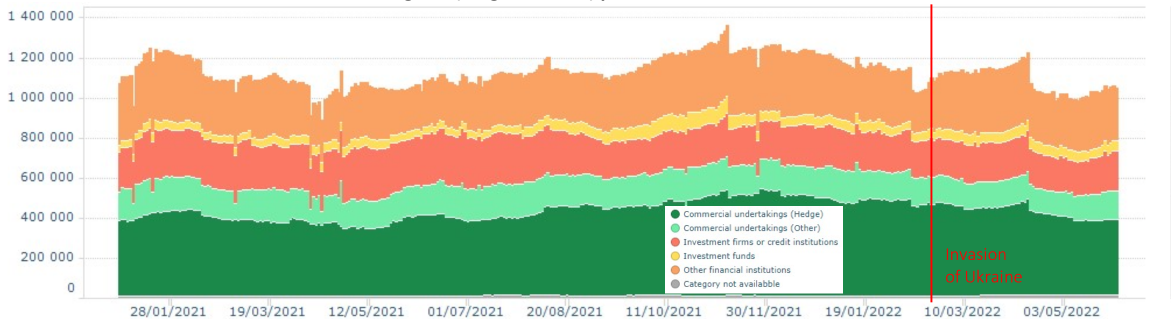
[13] The OI amounted to 526,000 contracts at 01/06/2022 compared with 521,000 at 01/06/2021. On average in the period following the invasion (from 24/02 to 01/06) the OI amounted to 543,000 contracts, compared with 527,000 in the same period last year.
[14] The proportion of positions held by commercial undertakings amounted to 49.5% at 01/06/2022 (including 36.0% for hedges), compared with 50.5% at 01/06/2021 (including 36.1% for hedges). On average in the period following the invasion (from 24/02 to 01/06) the proportion of commercial undertakings even slightly increased compared with a year ago (50.5% compared with 48.1%).

Cumulative proportion of gross (long and short) positions



- After the invasion of Ukraine the positions in absolute terms (i.e. in number of contracts, not as a % of the OI) held by commercial undertakings continued their decline which began in December 2021 (especially for long hedges) but have increased since mid-May and have once again reached a level very similar to that of last year.[15]

Cumulative gross (long and short) positions in number of contracts

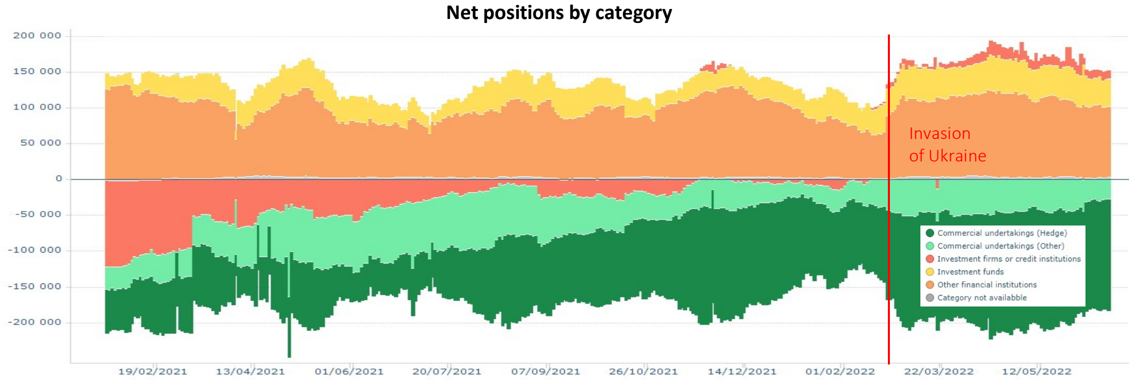


Did financial players contribute to the rise in prices?

Substantial econometric analyses would be needed to answer this question, which goes beyond the purpose of this study. The data on positions in Matif derivatives suggests a few comments:

- The proportion of financial players holding positions increased symmetrically compared to the commercial undertakings[16] following the invasion of Ukraine, but then stabilised at levels similar to the same date last year (after falling in December 2021 and January 2022).[17]
- Both long and short positions of financial entities increased but the latter to a lesser extent, as a result their net positions grew. This change mainly stemmed from the other financial institutions as positions of investment funds and investment firms had varied little since the invasion of Ukraine.
- Over a longer period, the change in net positions of investment firms reflects a trend that started at the beginning of 2021, displaying a steady decrease in their short positions that led to an inversion of their net positions, from short to long.

Net positions by category



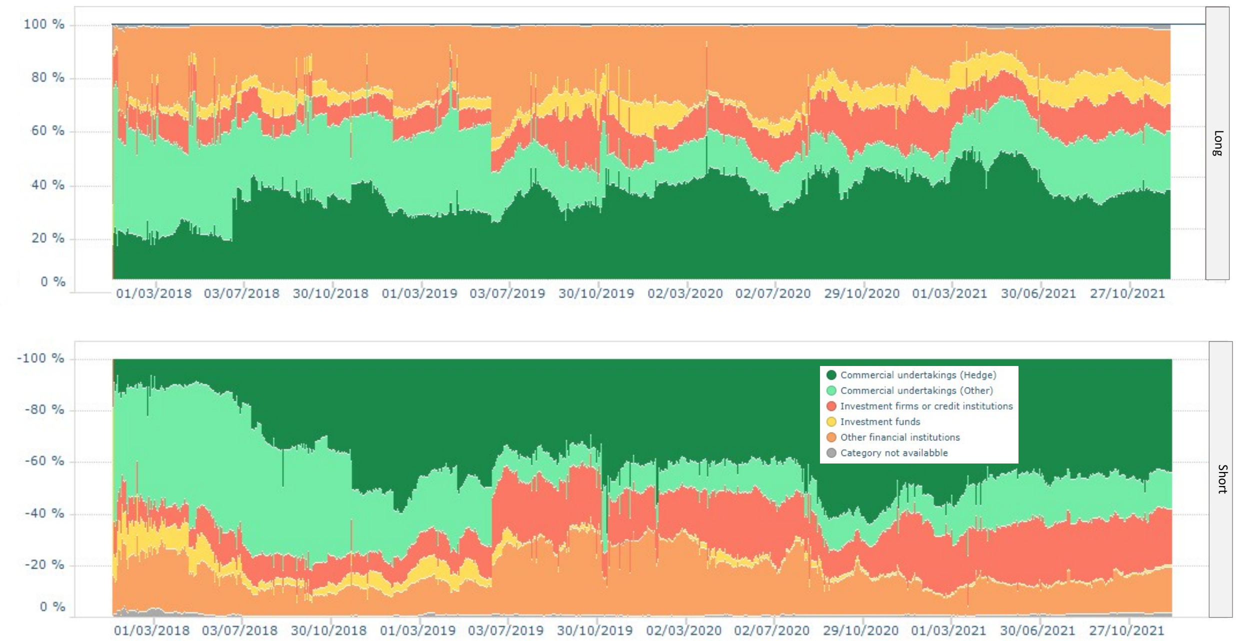
[15] The positions held by commercial undertakings amounted to 521,000 (long and short) contracts at 01/06/2022 compared with 526,000 contracts at 01/06/2021.

[16] In addition to the commercial and financial players, there are a few entities for which the category is not available, which explains the difference between the sum of their market shares and 100%.

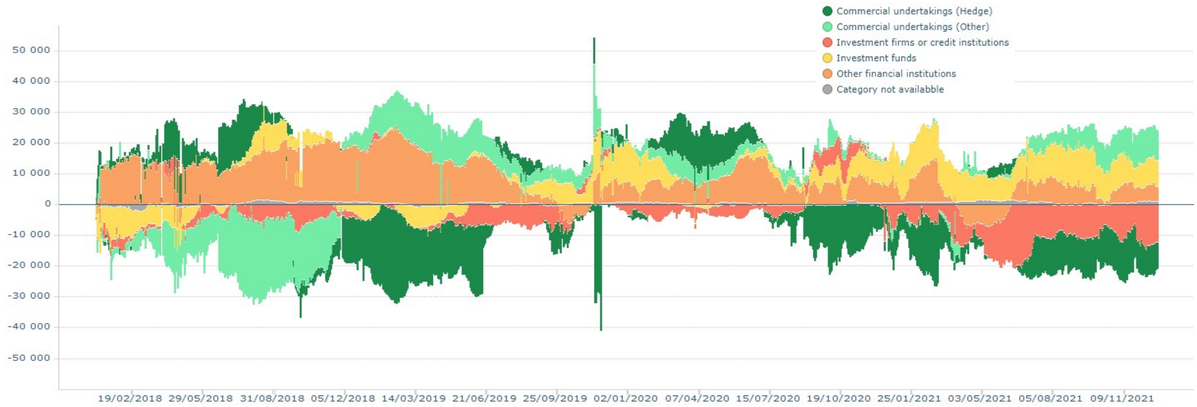
[17] On average in the period following the invasion (from 24/02 to 01/06), this proportion was 48.6% compared with 51.3% the previous year.

2.2. Specific features of reported positions on rapeseed contracts

Gross positions (long and short)



Net positions

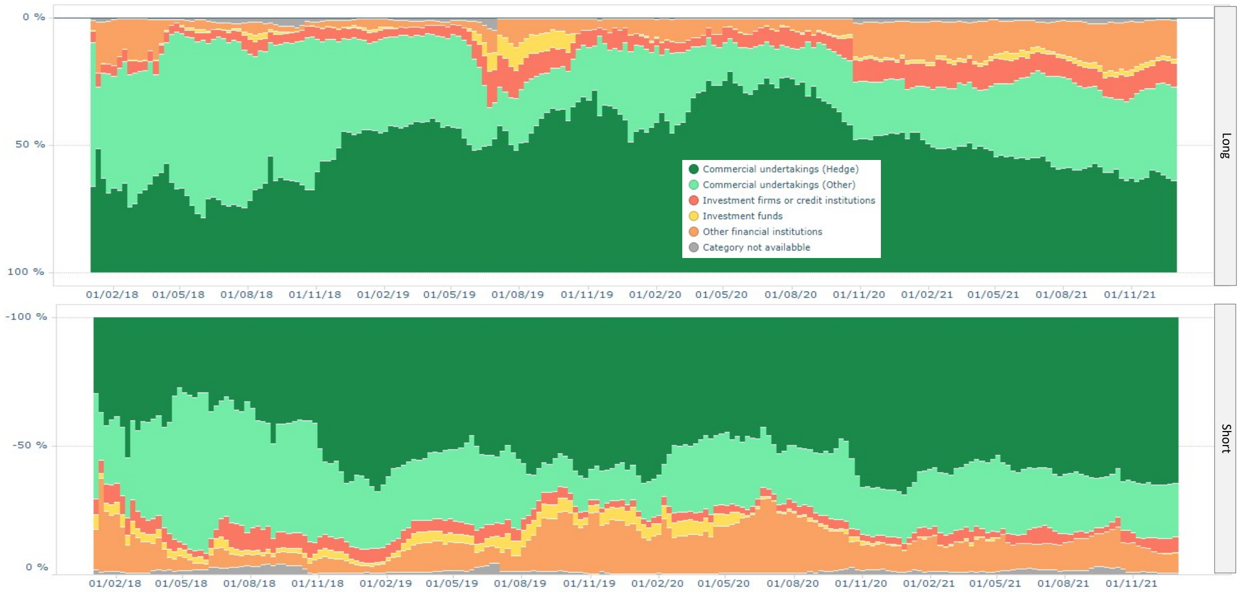


Rapeseed positions share generally the same core characteristics as those in wheat, such as the predominance of commercial undertakings in the gross positions (59%), with generally short cumulative net positions (66% of trading sessions over the period), and conversely long positions for the investment funds and other financial institutions categories (long positions 72% and 90% of the time, respectively).

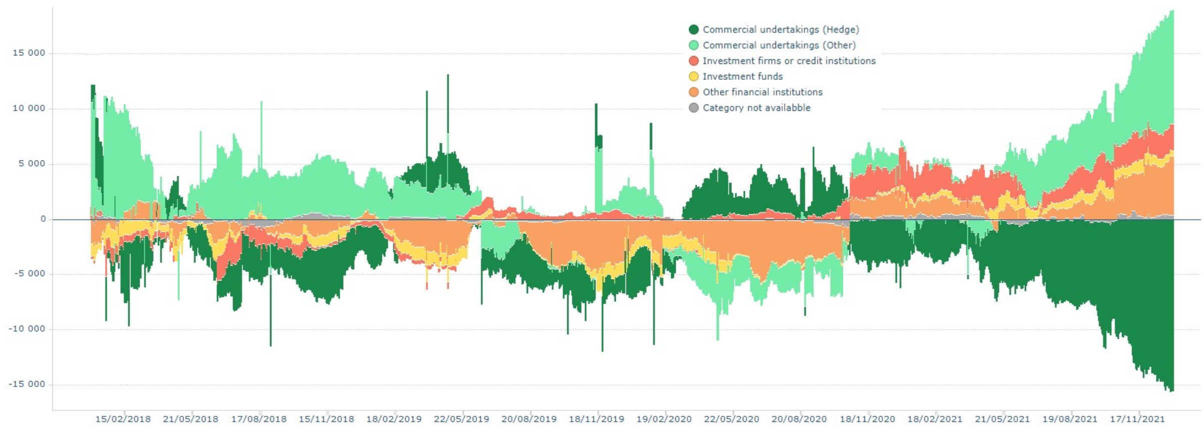
Investment firms' net positions of, on the other hand, show rather more erratic positioning, changing side eight times over the period, even in the absence of major price trends. This volatility can be explained by a relative balance between long and short positions, which, moreover, are smaller compared with the gross positions of the other categories of market participant (in rapeseed, investment firms hold only 18% of gross positions versus 20% in wheat), the difference thus being more variable.

2.3. Specific features of reported positions on corn contracts

Gross positions (long and short)



Net positions



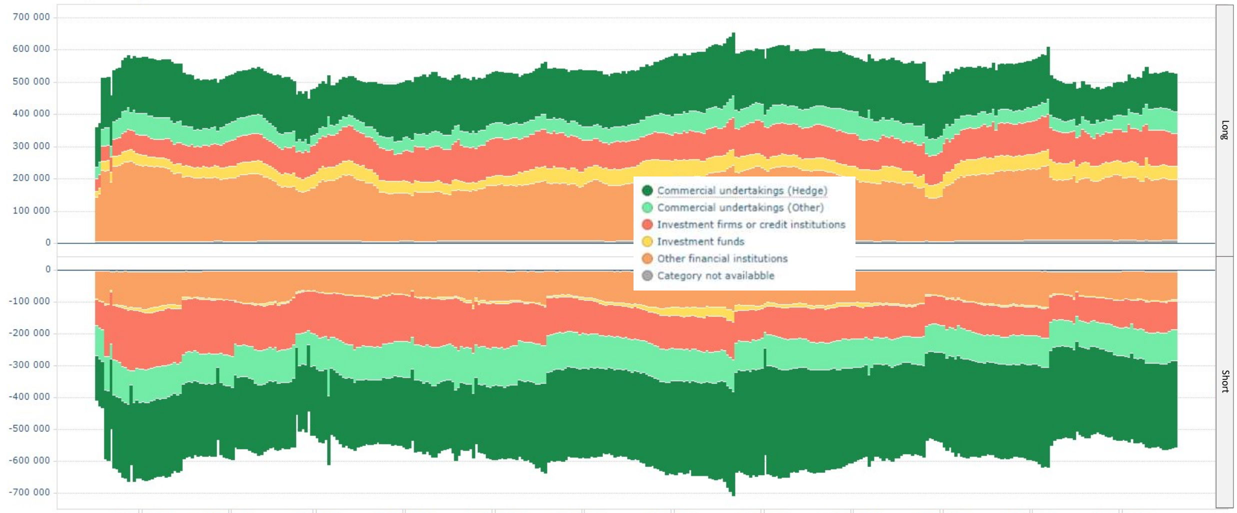
The corn derivatives market is far less liquid and less deep than the wheat and rapeseed markets. The average number of corn contracts traded is, for example, more than 20 times smaller than the number for wheat and the open interest in corn is more than 10 times smaller than in wheat. This market is also far more concentrated.

It is marked by the even broader weight of commercial undertakings, which hold more than three-quarters of the gross positions.
As for wheat, these market participants' net positions fluctuated with relative cyclicality during each of the campaigns until the end of 2020, notably due to their hedges. Starting from the contract roll of November 2020, a drastic change took place, with the chronic inversion of several categories: the three categories of financial operators (investment firms, investment funds and other financial institutions) greatly increased their long positions (their short positions remaining at a relatively constant level). For their part, the commercial undertakings greatly increased their short positions for their hedging and then the long positions for their other strategies. Although these changes are in fact linked to the strategy of a single main market participant in each of these categories, they show noteworthy similarities with the trends observed for wheat since the start of 2021.

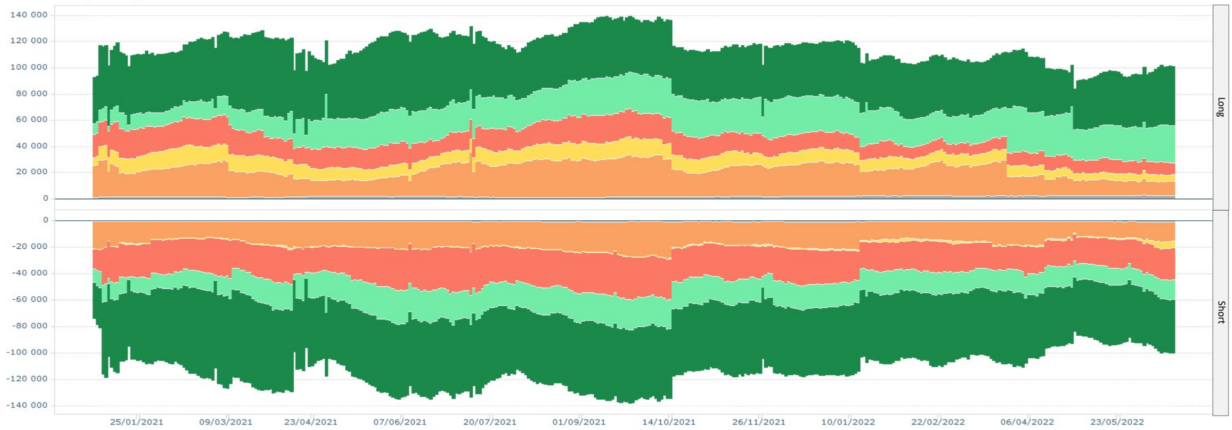
It remains to be determined whether these recent changes that went hand-in-hand with the phase of rising prices, and which therefore may have at first seemed short-term, will persist in the new environment in the wake of the war in Ukraine.

Annex: gross positions by category of market participant

Wheat (futures and options, from 01/01/2021 to 17/06/2022)



Rapeseed (futures and options, from 01/01/2021 to 17/06/2022)



Corn (futures and options, from 01/01/2021 to 17/06/2022)