29 June 2023
ESMA71-545613100-2341

Stability risks in EU energy markets, the role of central clearing, and policy responses

Keynote speech

FIA Forum Leipzig, Developments in European Commodity Derivatives - 29 June 2023

Froukelien Wendt

Independent Member of the CCP Supervisory Committee

Introduction

Thank you for the opportunity to speak here. I realise that I am speaking about the crisis on EU energy markets in front of an audience that really **lived** it, an audience who knows like no-one else how events unfolded and how this has impacted them. I am excited to discuss this further with you, any measures taken, and how you see the way forward.

As we all know, following the invasion of Ukraine by Russia, and the reduction in supply of natural gas from Russia, EU energy markets were subject to periods of stress with sharp spikes in prices and volatility, which led to exceptional measures, both in the public and private sector.

In this speech I would like to look deeper into financial stability risks and the role of CCPs in energy markets during the last year. I would like to bring the views of a regulator of financial markets with a strong interest in financial stability and systemic risks inherent in the functioning of energy markets.

Given that CCPs are of systemic importance - due to their central role in markets and the related concentration of risks - the continuation of their critical operations is essential. In analysing the events of the last year, we can conclude that CCPs were generally able to continue their critical operations. Also, trading on EU energy markets generally remained orderly despite the high volatility and a sharp reduction in liquidity.

While this is good news, we all know that the high prices and volatility resulted in high margin calls in the cleared space, putting significant liquidity stress on the clearing eco-system. As price volatility surged, margin requirements on derivatives positions increased in line with CCP risk models. It was challenging for some non-financial corporates (NFCs) to obtain liquidity on a short-time horizon to meet these margin calls. In some cases, those liquidity strains resulted in public intervention, with governments providing programs for public guarantees.

Relevant questions to ask are, for example, whether there are areas for improvement in the commodities clearing ecosystem, what measures to take to reduce liquidity pressures in similar futures stress events, and whether we are prepared to manage potential new price increases, suppose the next winter will be extremely cold and prices will soar again.

Specifics of energy derivatives markets

While energy markets display characteristics common to traditional financial markets, there are also important differences. For example, commodities markets in the EU are highly concentrated at all levels, including the trading, clearing and funding levels. Another specific feature of the energy market is that a large share of the trading activity is carried out by non-financial companies, including energy utilities and independent commodity trading firms. Furthermore, the relative activity of financial intermediaries, such as banks, is lower. Nevertheless, banks are essential players as providers of credit and liquidity services to the non-financial corporates, and as such link the commodities markets to the financial system. Finally, physical delivery and storage of the underlying commodity are an important characteristic of commodities markets.

Analysis of events happening in the energy derivatives market during 2022

ESMA has actively monitored the events unfolding in the energy market last year. I would like to share with you some key findings of our analysis of the impact of crisis on the cleared commodities derivatives space. These findings were also published in various publications, including ESMA's article 'EU natural gas derivatives markets: risks and trends' of May 2023. Also, ESMA contributed to the FSB note on commodities markets and financial stability, published in February 2023. Let me highlight four findings:

1. I already mentioned the first one: Margin calls put liquidity stress on clearing members and clients, in particular on non-financial companies

Margin calls are an essential risk management tool of CCPs to protect themselves and the broader financial system. CCPs are nodes in a network of market participants, taking over credit risk of these participants and as such concentrating significant credit and liquidity exposures. In order to protect itself against a defaulter member, it calls for margins to cover exposures. This can be initial margin at the inception and during the lifetime of the derivative contract to protect against the default of a counterparty, or variation margins to reflect the current market value of the trade for the counterparty with a mark-to-market loss. These margin calls also exist in non-centrally cleared markets, however, there is less standardization and more flexibility in setting the terms for margin arrangements.

Following the invasion of Ukraine and the steep increase in prices, counterparties had to post variation margins and additional initial margins to compensate for the heightened volatility and prices. The peak margin increase called for by EU and UK CCPs clearing commodities was 10% on the day of the invasion, i.e. an amount of 18 bln euros. The peak in August was even higher, with an increase of 11% or 29 bln euros.

How did market participants cope with these high margin calls? The FSB's report outlined that there is little data available on how clients in the commodities market funded their margin calls, however, market intelligence suggests that some commodities traders increased their use of revolving credit facilities (RCFs) or by borrowing additional funds. There is also some evidence of commodities traders successfully applying for additional credit lines, though some of these loans came with high associated interest rates and restrictive covenants. Additionally, a few commodities traders cut back their dividends to conserve cash or sought other financing, such as via private equity.

Nevertheless, generally margin calls led to funding stress and liquidity strains for clearing members and clients, in particular for non-financial companies, as their balance sheet is typically less liquid than that of other financial firms. Also, non-financial corporates may have limited access to funding sources. In some cases, governments had to step in and provide guarantees or capital injections into troubled companies.

2. Some banks limited credit to comply with prudential requirements

As mentioned, banks' role in the broader commodities ecosystem consists of the provision of credit and funding liquidity to commodities firms as well as financial institutions. Furthermore, banks provide settlement services as clearing members of CCPs to pass margins from commodities firms to CCPs. They also act as counterparty of NFCs in over the counter (OTC) derivatives trades, allowing their clients to hedge their positions with derivatives.

While banks initially increased their lending in the first quarter of 2022 to support commodities traders in meeting margin calls, at a certain moment some banks ceased extending more credit to smaller or financially weaker commodities traders. According to market sources, a main reason has been to control exposures and meet prudential risk requirements. This put further stress on non-financial companies in need of liquidity.

3. Market participants cut back trading in cleared and non-cleared markets

In the EU, more than 70% of positions on futures exchanges are related to NFCs, especially energy firms. During 2022, EU trade repository data suggests that NFCs changed their trading pattern.

A first visible change has been a move away from exchange trading and central clearing towards OTC trading and bilateral clearing. While most trades in natural gas derivatives are still taking place on trading platforms, a substantial shift towards the OTC market was visible since the summer last year, in particular for NFCs. The migration can take place, for example, by closing-out the original exchange positions and creating a new physically-settled OTC contract. These firms may have migrated to reduce margin requirements and benefit from more flexibility provided by bilateral contracts. Though the move may reduce liquidity stress, firms may trade off liquidity risk for counterparty risk, and contribute to a reduction in market liquidity.

We also saw a reduction in hedging activity by energy firms, in particular for longer maturities, illustrated by the cut back in open interest in commodities derivatives markets. Reduced hedging by commodities firms exposes them to higher market risk. A side effect is that reduced hedging activity impacts market liquidity with lower depth and wider bid-ask spreads.

4. Concentration and interlinkages in the commodities sector may exacerbate (potential) shocks

By its nature, energy markets are highly concentrated at all levels. Trading tends to be concentrated in a few firms which account for most of the trading volumes.[1]

On the infrastructure side, only two exchanges and linked CCPs clear most of commodities products, and there are three EU general clearing members that facilitate most of the funding of margin calls and market access. In addition, there are a few non-EU clearing members active. Also, there is a small group of NFCs that are responsible for a large part of the liquidity on commodities markets. [2]

Why is this concentration risky? A risk related to this concentration of trading members is that some of those entities may try to liquidate their positions at the same time as providers of market liquidity, such as proprietary trading firms, may withdraw from the market in times of

[1] EU trade repository data shows that the top 5 net positions of EU NFCs account for more than 50% of average daily value (ADV) with an increase since February 2022. At contract level, the top 5 net positions of EU NFCs on single futures account for more than 400% of ADV on longer maturities.

[2] Analysis shows that the banks with the largest amount of clearing activity have a large number of clients (low concentration ratio), while banks with a low amount of activity tend to have a small number of clients (high concentration). Many energy firms also use a small number of clearing banks (high concentration), though this is not the case for all companies. From a clients' perspective, some firms use only one clearing member, which are mainly firms with smaller exposures except for one outlier. There could be potential contagion effects between clients and clearing members if the client or clearing member fails.

stress, resulting in a significant reduction in liquidity offered to market participants in times where it is needed most.

Some clearing members play a key role in transmitting margin requirements. Here the risk is that the dependencies are high, and, for example, operational or financial unavailability may cause substantial stress and potential hampering of the fulfilment of margin and settlement obligations.

Concentration in trading and clearing services provision means that the vulnerabilities identified above could be amplified if large shocks were to be accompanied by a lack of preparedness by market participants in terms of liquidity risk management, as we saw in the last year.

Policy responses of ESMA and other public authorities

ESMA took temporary measures at the request of the European Commission. A dedicated activity has been a review of the list of eligible collateral under EMIR as requested by the European Commission. Following this review, the list of eligible collateral has been temporarily extended. The relevant RTS came into force from 30th of November and has a duration of 1 year.

ESMA also developed an advice to the European Commission on the market correction mechanism (MCM) as required by the Regulation that the European Council of December 2022, which aims to protect EU citizens and the economy against excessively high prices. ESMA published a preliminary data report in January 2023 indicating that the adoption of the MCM Regulation will not come without consequences on market participants' trading behaviour and may have an effect on the ability of all market participants to effectively manage their risks. The MCM is also expected to impact the relevant CCPs and the clearing ecosystem as the use of less reliable price sources for the CCP's margin calculations and default management may affect the CCP's ability to manage risks, and may result in an overall increase in margin calls.

More structural improvements concern the key topic of the procyclicality of margin calls in both the central and bilaterally cleared market. Mitigation of margin procyclicality is addressed in both the international standards, as well as in the EU rules for CCPs. A certain degree of margin procyclicality is unavoidable, given that margin requirements reflect evolving risks. EU requirements for CCPs require that CCPs include anti-procyclicality features in the design of their margin models, such as a floor, a buffer, or a percentage of margin. I see these measures as dikes that can stop high water overflowing the land. Even though they cannot stop a tsunami

of margin calls that we saw last year, I still think it is important to have these in place to at least temper the impact of high margin calls.

ESMA has reviewed the EU rules in light of the events last year and has proposed amendments to the existing regulatory technical standards (RTS). At the international level, ESMA contributes to the work of the international standard setters on margin, including the report of the Basel Committee on Banking Supervision, CPMI and IOSCO that was issued in August 2022 and provides us with a roadmap for action, including further analysing the procyclical nature of initial and variation margin.

A widely heard measure would also be the increase of transparency around margin models to better prepare clearing members and clients for potential margin calls. Public authorities are jointly revising how margin transparency can be enhanced, in terms of both the transparency of CCPs vis-à-vis clearing members and the transparency of clearing members vis-à-vis clients.

Finally, as part of ESMA's regular CCP stress test, we incorporated an analysis of the resilience of CCPs under the real-life shock events, applying in an ad hoc analysis the actual shocks in the commodities markets. An outcome of the most recent stress test is that there is room for improvement at certain CCPs in setting their concentration risk add-ons.

Looking ahead

Prices have currently come down to pre-invasion levels, and it feels as if the crisis is behind us. I understand that non-financial companies have been working on enhancing their liquidity management and access to collateral. With measures taken at both the public and private sector, are we in a better place to manage potential new increases in commodities prices and volatility? I look forward to further discussing this as part of the event today.