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# Analysing the Role of Hedgers and Speculators in the EU ETS

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## Abstract

The EU Emission Trading System (EU ETS), a cap-and-trade scheme, was set up in 2005 and is now in its fourth phase in terms of emissions covered and regulatory development. As the EU ETS has matured, financial actors have increasingly participated alongside compliance entities, raising concerns about the balance between hedging and speculative activities. Our contribution addresses the critical issue of distinguishing between these two types of market behaviour and understanding their respective impacts on market dynamics. However, because of the special structure of the EU ETS, with a specified date for compliance implying a specific time dynamic of hedging pressure, and the fact that there is no natural short side—as there are no producers and consumers who need to hedge against price changes—trading behavior in the EU ETS is substantially different from usual commodity markets, and its analysis represents particular challenges.

We analyse monthly futures on EU Allowances (EUA) traded on the Intercontinental Exchange (ICE). After a significant price increase in 2021, there was a volatile period followed by a steady price decrease in 2023. Over their history, EUAs have experienced substantial structural changes in response to policy changes, energy market dynamics, and global climate targets, which resulted in rapid price changes and periods of high volatility. We use closing prices, volume, and open interest for our study. These data allow us to observe positions by individual contracts, though not by trader type. The evolution of open interest indicates that speculative activity is predominantly concentrated in front-year December futures, whereas hedging activity is more pronounced in March contracts and next-to-front-year December futures. This pattern is different from traditional commodity markets, where front-month contracts have the greatest liquidity as settlement approaches. To identify particular categories of traders, we examine weekly Commitment of Traders (CoT) reports, which provide aggregated positions by trader category across all futures and options. We distinguish long and short positions held by banks, funds, and commercials.

One key structural finding is that hedging and speculation take place in separate selected contracts. We find that banks and compliant commercials trade mainly with each other, which gives banks an important role in providing liquidity for long-term hedging. However, funds play a role in short-term trading as a counterparty of commercials. The increase in trading activity between banks and funds during our observation period suggests a steady increase in speculation. Whether this is of purely speculative nature or an indication of a hedge of portfolios of financial assets against climate risk is subject to further investigations. Financial activity plays a substantial role in the EU ETS and should be carefully monitored by policymakers to ensure it does not deplete the long-term liquidity required for effective hedging. Preliminary evidence suggests that funds may mainly influence short-term price formation, which indicates a more speculative nature of their trading activities, but their role needs to be examined more closely.

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