Primary Auction Information, Price Discovery, and Liquidity in Carbon Futures

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Abstract

This paper examines price discovery and liquidity dynamics in European carbon futures around the publication of primary auction results in the European Union Emissions Trading System. We document significant futures price adjustments at auction result announcement. Auction price surprises are positively associated with subsequent futures price changes. The response is stronger when pre-auction realized spreads are lower, suggesting that auction information is incorporated more significantly when the futures market is more information-sensitive or exposed to greater adverse selection risk. Overall, the findings show that EU ETS auctions function not only as an allocation mechanism but also as scheduled information events that contribute to short-run price discovery in carbon markets.