



On the realized volatility of the ECX CO 2 emissions 2008 futures contract: distribution, dynamics and forecasting

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Résumé en anglais	<p>This article documents the conditional and unconditional distributions of the realized volatility for the 2008 futures contract in the European climate exchange (ECX), which is valid under the EU emissions trading scheme (EU ETS). Realized volatility measures from naive, kernel-based and subsampling estimators are used to obtain inferences about the distributional and dynamic properties of the ECX emissions futures volatility. The distribution of the daily realized volatility in logarithmic form is shown to be close to normal. The mixture-of-normals hypothesis is strongly rejected, as the returns standardized using daily measures of volatility clearly departs from normality. A simplified HAR-RV model (Corsi in J Financ Econ 7:174–196, 2009) with only a weekly component, which reproduces long memory properties of the series, is then used to model the volatility dynamics. Finally, the predictive accuracy of the HAR-RV model is tested against GARCH specifications using one-step-ahead forecasts, which confirms the HAR-RV superior ability.</p>
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