

Does the Carbon Market Help or Hurt the Stock Price of Electricity Companies? Further Evidence from the European Context

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The electricity sector is the largest participant in the European Union Emissions Trading Scheme (EU-ETS). This study provides further evidence on the effect of carbon pricing on stock returns of electricity companies in the EU-ETS. The investigation is undertaken in both Phases I and II of the EU-ETS using Multivariate Generalized AutoRegressive Conditional Heteroskedasticity (M-GARCH) approaches, which include a Constant Conditional Correlation (CCC) M-GARCH and a Dynamic Conditional Correlation (DCC) M-GARCH methods. The results show that the carbon market significantly affected the returns of electricity companies in Phase I, but not in Phase II of the EU-ETS. However, a volatility spillover effect between the carbon market returns and electricity stock returns was found in both Phase I and Phase II, with stronger coefficient in Phase II. These results imply that in the short run, electricity companies are significantly affected by the carbon market.