Optimal Portfolio Selection in Carbon Emissions Market

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Abstract.

In 2008 new phase of an emissions trading scheme was launched in the EU in order to regulate the quantity of carbon dioxide emitted by key industries. We show that a regulated firm should consider both abatement and active portfolio management in its optimal response to this legislation. These observations are extended to a continuous time partial-equilibrium model to highlight the connection between physical production and participation in this new financial market. The policy implications of the optimal trajectories are discussed.

Keywords New Markets; Portfolio Optimisation; Stochastic Control

This is joint work with Goran Peskir.