

Levy Model for Commodity Pricing

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Abstract : The aim in present paper is to construct an affordable and reliable commodity prices based on a recalculation of its cost through time which allows visualize the potential risks and thus, take more appropriate decisions regarding forecasts. Here attention has been focused on Levy model, more reliable and realistic than classical random Gaussian one as it takes into consideration observed abrupt jumps in case of sudden price variation. In application to Energy Trading sector where it has never been used before, equations corresponding to Levy model have been written for electricity pricing in European market. Parameters have been set in order to predict and simulate the price and its evolution through time to remarkable accuracy. As predicted by Levy model, the results show significant spikes which reach unconventional levels contrary to currently used Brownian model.

Keywords : commodity pricing, Lévy Model, price spikes, electricity market

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