

Fractal nature of the profit landscape

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Abstract

We investigate the structure of the profit landscape obtained from a simple strategy applied for the daily stock price data. The strategy is parameterized by two variables, p and q , and stocks are sold or bought, if the log return is bigger than p or less than $-q$. Repetition of this simple strategy for a long time gives the profit in the two-dimensional parameter space. We show that the profit landscape has a fractal structure, and discuss its implication.

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