THE INDUCTIVE GENERATION OF THE VOLATILITY SMILE REGRESSION MODELS

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Models of European-type options could be based on maturity and strike price as independent variables. The authors suppose the volatility smile models based not only the expert knowledge, but also on the measured data. The model generation algorithm was proposed. It generates volatility models of the optimal structure inductively using implied volatility data and expert considerations. The models satisfy expert assessments. The S&P500 option was considered as an example. The project was supported by RFBR, 07-07-00181.

References
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