

Accepted Manuscript

Calibration of the risk-neutral density function by maximization of a two-parameter entropy

Gifty Malhotra, R. Srivastava, H.C. Taneja

PII: S0378-4371(18)31088-4
DOI: <https://doi.org/10.1016/j.physa.2018.08.148>
Reference: PHYSA 20034

To appear in: *Physica A*

Received date: 27 March 2018
Revised date: 7 August 2018

Please cite this article as: Calibration of the risk-neutral density function by maximization of a two-parameter entropy, *Physica A* (2018), <https://doi.org/10.1016/j.physa.2018.08.148>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Highlights

- Calibration of the risk-neutral density function by maximisation of the Varma entropy (two parameter entropy) is proposed.
- Second order moment constraint is imposed by taking mean reverting quadratic arc expression of volatility.
- Calibrated risk-neutral density function is used to price the European call options at different strikes.

Download English Version:

<https://daneshyari.com/en/article/8954630>

Download Persian Version:

<https://daneshyari.com/article/8954630>

[Daneshyari.com](https://daneshyari.com)