



Utility based pricing and hedging of jump diffusion processes with a view to applications

Jochen Zahn

(Submitted on 7 Jun 2011 (v1), last revised 4 Dec 2012 (this version, v2))

We discuss utility based pricing and hedging of jump diffusion processes with emphasis on the practical applicability of the framework. We point out two difficulties that seem to limit this applicability, namely drift dependence and essential risk aversion independence. We suggest to solve these by a re-interpretation of the framework. This leads to the notion of an implied drift. We also present a heuristic derivation of the marginal indifference price and the marginal optimal hedge that might be useful in numerical computations.

Comments: 23 pages, v2: published
 Subjects: **Computational Finance (q-fin.CP)**; Pricing of Securities (q-fin.PR)
 Journal reference: International Journal of Theoretical and Applied Finance 15 (2012) 1250052
 DOI: [10.1142/S0219024912500525](https://doi.org/10.1142/S0219024912500525)
 Cite as: [arXiv:1106.1395](https://arxiv.org/abs/1106.1395) [q-fin.CP]
 (or [arXiv:1106.1395v2](https://arxiv.org/abs/1106.1395v2) [q-fin.CP] for this version)

Submission history

From: Jochen Zahn [[view email](#)]
[\[v1\]](#) Tue, 7 Jun 2011 17:17:01 GMT (56kb,D)
[\[v2\]](#) Tue, 4 Dec 2012 19:55:07 GMT (58kb,D)

[Which authors of this paper are endorsers?](#)

Download:

- [PDF](#)
- [Other formats](#)

Current browse context:

q-fin.CP
[< prev](#) | [next >](#)
[new](#) | [recent](#) | [1106](#)

Change to browse by:

[q-fin](#)
[q-fin.PR](#)

References & Citations

- [NASA ADS](#)

Bookmark([what is this?](#))

