Search or Article-id   (Help | Advanced search)

All papers [▼] Go!

Quantitative Finance > Portfolio Management

Optimal consumption and investment with bounded downside risk for power utility functions

Claudia Kluppelberg, Serguei Pergamenchtchikov (LMRS)

(Submitted on 12 Feb 2010)

We investigate optimal consumption and investment problems for a Black-Scholes market under uniform restrictions on Value-at-Risk and Expected Shortfall. We formulate various utility maximization problems, which can be solved explicitly. We compare the optimal solutions in form of optimal value, optimal control and optimal wealth to analogous problems under additional uniform risk bounds. Our proofs are partly based on solutions to Hamilton-Jacobi-Bellman equations, and we prove a corresponding verification theorem. This work was supported by the European Science Foundation through the AMaMeF programme.

Comments:	36 pages
Subjects:	**Portfolio Management (q-fin.PM)**; Probability (math.PR); Pricing of Securities (q-fin.PR)
MSC classes:	91B28, 93E20
Cite as:	**arXiv:1002.2487v1 [q-fin.PM]**

Submission history

Which authors of this paper are endorsers?

Link back to: arXiv, form interface, contact.

Download:

- PDF
- PostScript
- Other formats

Current browse context:
q-fin.PM
< prev | next >
new | recent | 1002

Change to browse by:

math
  math.PR
q-fin
  q-fin.PR

References & Citations

- NASA ADS

Bookmark(what is this?)