



Applied Mathematical Finance >

Volume 1, 1994 - [Issue 1](#)

140 | 35 | 0
Views | CrossRef citations to date | Altmetric

Original Articles

Delta, gamma and bucket hedging of interest rate derivatives

Robert A. Jarrow & Stuart M. Turnbull

Pages 21-48 | Received 01 Apr 1994, Published online: 28 Jul 2006

🗨️ Cite this article 🔗 <https://doi.org/10.1080/135048694000000002>



📖 References

🗨️ Citations

📊 Metrics

🖨️ Reprints & Permissions

Read this article

🔗 Share

Abstract

The paper describes a framework for delta and gamma hedging an interest rate portfolio using a multifactor form of the Heath et al. (1992) model. A formal description of bucket hedging is given along with a discussion of some of the issues surrounding the choice of bucket lengths. Given that a small number of factors can describe the evolution of the term structure, the bucket deltas are defined in terms of these factors. The hedging of corporate bonds is also addressed.

Keywords:

delta hedging

gamma hedging

bucket hedging

interest rate derivatives

*Current holder of the Bank of Montreal Chair in Banking and Finance, and Research Associate of the Institute for Policy Analysis, University of Toronto.

*Current holder of the Bank of Montreal Chair in Banking and Finance, and Research Associate of the Institute for Policy Analysis, University of Toronto.

Notes

*Current holder of the Bank of Montreal Chair in Banking and Finance, and Research Associate of the Institute for Policy Analysis, University of Toronto.

Related research

People also read	Recommended articles	Cited by 35
------------------	----------------------	----------------

Information for

[Authors](#)

[R&D professionals](#)

[Editors](#)

[Librarians](#)

[Societies](#)

Opportunities

[Reprints and e-prints](#)

[Advertising solutions](#)

[Accelerated publication](#)

[Corporate access solutions](#)

Open access

[Overview](#)

[Open journals](#)

[Open Select](#)

[Dove Medical Press](#)

[F1000Research](#)

Help and information

[Help and contact](#)

[Newsroom](#)

[All journals](#)

[Books](#)

Keep up to date

Register to receive personalised research and resources by email



Sign me up



Copyright © 2025 Informa UK Limited [Privacy policy](#) [Cookies](#) [Terms & conditions](#)

[Accessibility](#)

 Taylor and Francis Group

Registered in England & Wales No. 01072954
5 Howick Place | London | SW1P 1WG