



The European Journal of Finance >

Volume 3, 1997 - [Issue 1](#)

135 | 42

Views | CrossRef citations to date | 0 Altmetric

Original Articles

# Transformation of Heath-Jarrow-Morton models to Markovian systems

R. Bhar & C. Chiarella

Pages 1-26 | Published online: 14 Oct 2010

🗨️ Cite this article 🔗 <https://doi.org/10.1080/135184797337516>

Sample our  
Area Studies  
Journals  
>> **Sign in here** to start your access  
to the latest two volumes for 14 days

📖 References

🗨️ Citations

📊 Metrics

🖨️ Reprints & Permissions

Read this article

🔗 Share

## Abstract

A class of volatility functions for the forward rate process is considered, which allows the bond price dynamics in the Heath-Jarrow-Morton (HJM) framework to be reduced to a finite-dimensional Markovian system. The use of this Markovian system in estimation of parameters of the volatility function via use of the Kalman filter is discussed. Further, the Markovian system allows the link to be drawn between the HJM and the Vasicek/Cox-Ingersoll-Ross (CIR) frameworks for modelling the term structure of interest rates.

Keywords:

Heath-JARROW-MORTON Models Forward Rate Volatility Term Structure Dynamics Markovian Models Non-LINEAR Filtering Preference Free Partial Differential Equations

# Related research

People also read

Recommended articles

Cited by  
42

## 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

