



Endogenous Bubbles in Derivatives Markets: The Risk Neutral Valuation Paradox

Alessandro Fiori Maccioni

(Submitted on 26 Jun 2011)

This paper highlights the role of risk neutral investors in generating endogenous bubbles in derivatives markets. We propose the following theorem. A market for derivatives, which has all the features of a perfect market except completeness and has some risk neutral investors, may exhibit almost surely extreme price movements which represent a violation to the Gaussian random walk hypothesis. This can be viewed as a paradox because it contradicts wide-held conjectures about prices in informationally efficient markets with rational investors. The theorem implies that prices are not always good approximations of the fundamental values of derivatives, and that extreme price movements like price peaks or crashes may have endogenous origin and happen with a higher-than-normal frequency.

Comments: 22 pages

Subjects: **Trading and Market Microstructure (q-fin.TR)**; Pricing of Securities (q-fin.PR)

MSC classes: 60G, 60H, 91B, 91G

Cite as: **arXiv:1106.5274v1 [q-fin.TR]**

Submission history

From: Alessandro Fiori Maccioni [view email]

[v1] Sun, 26 Jun 2011 22:13:17 GMT (44kb)

Which authors of this paper are endorsers?

Download:

- PDF
- PostScript
- Other formats

Current browse context:

q-fin.TR

< prev | next >

new | recent | 1106

Change to browse by:

q-fin

q-fin.PR

References & Citations

- NASA ADS

Bookmark (what is this?)

