Uncertainty and implied variance bounds in long-memory models of the interest rate term structure

Published: September 1991

Volume 16, pages 287–312 (1991) Cite this article

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Summary

We find that long-term uncertainty in a linear model of the interest rate term structure can have dramatic effects on variance bounds implied by the expectations theories of the term structure. We bootstrap fractionally integrated models of the term structure of interest rates. The fractional order of integration's bootstrapped standard errors simulate uncertainty surrounding long-term forecasts of interest rates, and we find that it is possible to overstate the significance of variance-bounds violations by at least a factor of three and perhaps by a factor of ten when long-term uncertainty is ignored.

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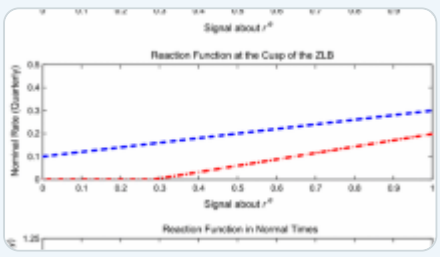

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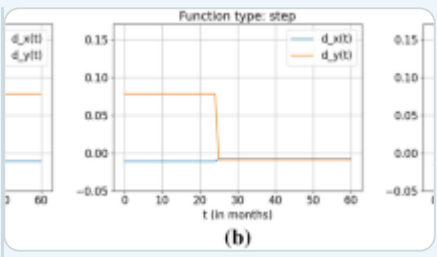

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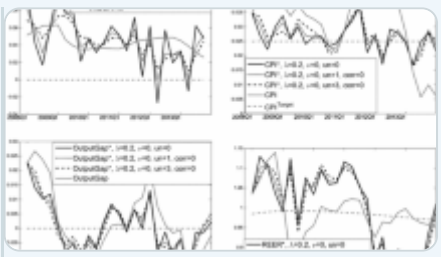

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I wish to thank Frank Diebold, Baldey Raj, Eric Renault, Fallaw Sowell and several anonymous referees for their comments and suggestions for earlier versions of this paper. The paper also benefited from comments made by many seminar participants at the World Econometric Congress, the European Econometric Society, and the American Finance Association meetings, the Board of Governors of the Federal Reserve System, the Ecole Nationale de la Statistique et de l'Administration Economique, and the departments of Finance and Statistics at Penn State University.

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Cite this article

Shea, G.S. Uncertainty and implied variance bounds in long-memory models of the interest rate term structure. *Empirical Economics* **16**, 287–312 (1991). https://doi.org/10.1007/BF01206277

Received	Revised	Issue date
15 November 1988	15 November 1989	September 1991

DOI

https://doi.org/10.1007/BF01206277

Keywords

Standard Error | Linear Model | Interest Rate | Economic Theory | Fractional Order

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