Range Volatility Models and Their Applications in Finance

Chapter

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Ray Yeutien Chou, Hengchih Chou & Nathan Liu

Abstract

There has been a rapid growth of range volatility due to the demand of empirical finance. This paper contains a review of the important development of range volatility, including various range estimators and range-based volatility models. In addition, other alternative models developed recently, such as range-based multivariate volatility models and realized ranges, are also considered here. Finally, this paper provides some relevant financial applications for range volatility.

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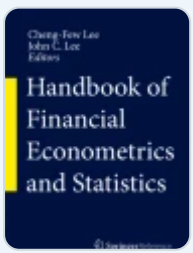

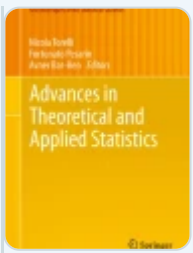

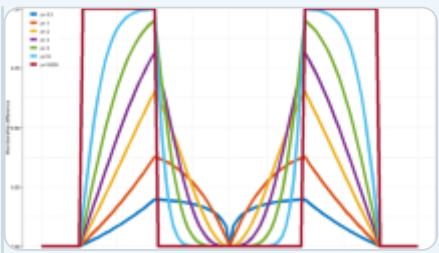

Notes

1. See Garman and Klass (1980), Beckers (1983), Ball and Torous (1984), Wiggins (1991), Rogers and Satchell (1991), Kunitomo (1992), Yang and Zhang (2000), Alizadeh et al. (2002), Brandt and Diebold (2006), Brandt and Jones (2006), Chou (2005, 2006), Cheung (2007), Martens and van Dijk (2007), Chou and Wang (2007), Chou et al. (2007), and Chou and Liu (2008a,b).

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Author information

Authors and Affiliations

Institute of Economics, Academia Sinica, #128, Yen-Jio-Yuan Road, Sec 2, Nankang, Taipei, Taiwan, ROC
Ray Yeutien Chou

Institute of Business Management, National Chiao Tung University, Taipei, Taiwan, ROC
Ray Yeutien Chou

Department of Shipping & Transportation Management, National Taiwan Ocean University, Keelung, Taiwan, ROC
Hengchih Chou

Department of Finance, Feng Chia University, Taichung, Taiwan, ROC
Nathan Liu

Corresponding author

Correspondence to Ray Yeutien Chou .

Editor information

Editors and Affiliations

Department of Finance and Economics, Rutgers University, 94 Rockafeller Road, Janice H. Levin Bldg., New Brunswick, NJ, 08854-8054, USA
Cheng-Few Lee

State Street Corp., Boston, MA, 94132, USA
Alice C. Lee

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