

# **A Value at Risk Analysis of Carry Trade using Skew-GARCH**

## **Models**

Huimin Chung and Yun-Jen Wang\*

### **Abstract**

This paper considers the Value at Risk (VaR) analysis of a very popular strategy in the currency markets, carry trade, which buys a long position in high interest rate currencies funded by selling in low interest rate currencies. We propose the two GARCH models with skew normal and skew  $t$  innovations and link them to the VaR of the return of carry trades. The stress testing results show that the skew normal density is relatively suitable for the measurement of VaR of carry trade returns such as taking a long position in New Zealand Dollar funded by selling Japanese Yen.

**Key words:** Currency markets, Carry trade, Skew normal GARCH, EM-type algorithms, Value at Risk(VaR).

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\* Huimin Chung (the corresponding author) and Yun-Jen Wang are both with the Graduate Institute of Finance, National Chiao Tung University, Taiwan. Address for correspondence: Graduate Institute of Finance, National Chiao Tung University, 1001 Ta-Hsueh Road, Hsinchu 30050, Taiwan; Tel: +886-3-5712121, ext. 57075; Fax: +886-3-5733260; e-mail: [chunghui@mail.nctu.edu.tw](mailto:chunghui@mail.nctu.edu.tw). Huimin Chung would like to gratefully acknowledge the financial support provided by the MoE ATU Plan of the National Chiao Tung University and National Science Council of Taiwan.