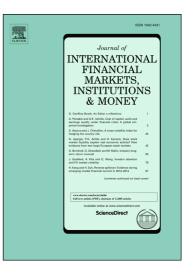
Accepted Manuscript

Time-dependent lead-lag relationship between the onshore and offshore Renminbi exchange rates

Hai-Chuan Xu, Wei-Xing Zhou, Didier Sornette

PII:	S1042-4431(17)30214-7
DOI:	http://dx.doi.org/10.1016/j.intfin.2017.05.001
Reference:	INTFIN 937
To appear in:	Journal of International Financial Markets, Institu- tions & Money
Received Date:	7 May 2016
Accepted Date:	2 May 2017



Please cite this article as: H-C. Xu, W-X. Zhou, D. Sornette, Time-dependent lead-lag relationship between the onshore and offshore Renminbi exchange rates, *Journal of International Financial Markets, Institutions & Money* (2017), doi: http://dx.doi.org/10.1016/j.intfin.2017.05.001

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

Time-dependent lead-lag relationship between the onshore and offshore Renminbi exchange rates

Hai-Chuan Xu^{a,b}, Wei-Xing Zhou^{a,c,*}, Didier Sornette^{d,e}

^aDepartment of Finance, East China University of Science and Technology, Shanghai 200237, China
^bPostdoctoral Research Station, East China University of Science and Technology, Shanghai 200237, China
^cDepartment of Mathematics, East China University of Science and Technology, Shanghai 200237, China
^dDepartment of Management, Technology and Economics, ETH Zurich, Zurich, Switzerland
^eSwiss Finance Institute, c/o University of Geneva, 40 blvd. Du Pont dArve, CH 1211 Geneva 4, Switzerland

Abstract

We employ the thermal optimal path method to explore both the long-term and short-term interaction patterns between the onshore CNY and offshore CNH exchange rates (2012-2015). For the daily data, the CNY and CNH exchange rates show a weak alternate lead-lag structure in most of the time periods. When CNY and CNH display a large disparity, the lead-lag relationship is uncertain and depends on the prevailing market factors. The minute-scale interaction pattern between the CNY and CNH exchange rates change over time according to different market situations. We find that US dollar appreciation is associated with a lead-lag relationship running from offshore to onshore, while a (contrarian) Renminbi appreciation is associated with a lead-lag relationship running from onshore to offshore. These results are robust with respect to different sub-sample analyses and variations of the key smoothing parameter of the TOP method.

Keywords: Renminbi exchange rates; Onshore and offshore markets; Lead-lag structure; Thermal optimal path

JEL classification: C14, F31, G15.

C

```
*Corresponding author.
```

Email addresses: wxzhou@ecust.edu.cn (Wei-Xing Zhou), dsornette@ethz.ch (Didier Sornette)

Preprint submitted to Journal of International Financial Markets, Institutions & Money

We thank participants at the 4th International Symposium in Computational Economics and Finance, Paris (April 2016). We are grateful to Fredj Jawadi, Shu-Heng Chen, Imran Shah, Estrella Gomez-Herrera, Yuyi Li, Yi-Heng Tseng and Yanyi Wang for insightful discussions of this work. Financial supports from the National Natural Science Foundation of China Grants (71501072), the China Postdoctoral Science Foundation Grants (2015M570342) and the Fundamental Research Funds for the Central Universities are acknowledged.

Download English Version:

https://daneshyari.com/en/article/5100990

Download Persian Version:

https://daneshyari.com/article/5100990

Daneshyari.com