



Applied Economics Letters >

Volume 27, 2020 - [Issue 1](#)

303 | 8 | 0  
Views | CrossRef citations to date | Altmetric

Articles

# Vega-informed trading and options market reform

Doojin Ryu, Doowon Ryu & Heejin Yang

Pages 19-24 | Published online: 25 Apr 2019

Cite this article <https://doi.org/10.1080/13504851.2019.1606399>



Sample our  
Economics, Finance,  
Business & Industry Journals  
>> [Sign in here](#) to start your access  
to the latest two volumes for 14 days

Full Article Figures & data References Citations Metrics

Reprints & Permissions

Read this article

Share

## ABSTRACT

This study examines the effect of reform to the KOSPI200 options market on volatility trading. We find that the information quality of net volatility demand significantly changes after the reform. The overall options demand for volatility does not predict spot market volatility before the market reform, but it does so after the reform. The significant information content of volatility trading can be attributed to the vega-weighted net demand of institutional investors.

## KEYWORDS:

KOSPI200 options

Market microstructure

Market reform

Vega information

Volatility trading

## JEL CLASSIFICATION:

G10

G13

G14

---

## Disclosure statement

No potential conflict of interest was reported by the authors.

---

## Notes

- <sup>1</sup> We classify options trades as those made by domestic individual investors, domestic institutional investors, and foreign institutional investors. The proportions and trading volumes of foreign individual investors and government-owned firms are negligible in the KOSPI200 options market.
- <sup>2</sup> The lagged realized volatility (RV) is included in our model to take into account volatility persistency and clustering. If we do not control for the RV time series, the significantly estimated coefficients on the options demand measures do not guarantee volatility information content of options trading. When we incorporate more lagged RV terms into the regression equation, our conclusion remains the same.
- <sup>3</sup> For robustness, we construct some additional demand measures: 1) the net demand measure (e.g.,  $D_t = \sum_K \sum_T 1_{CtK,T} \partial_{CtK,T} \sigma_t (\text{BuyCall}_{tK,T} - \text{SellCall}_{tK,T}) + \sum_K \sum_T 1_{PtK,T} \partial_{PtK,T} \sigma_t (\text{BuyPut}_{tK,T} - \text{SellPut}_{tK,T})$ ); 2) the volume-adjusted demand measure (e.g.,  $PD_t = \sum_K \sum_T 1_{CtK,T} \partial_{CtK,T} \sigma_t (\text{BuyCall}_{tK,T} / OV_t) + \sum_K \sum_T 1_{PtK,T} \partial_{PtK,T} \sigma_t (\text{BuyPut}_{tK,T} / OV_t)$ , where  $OV_t$  denotes the total options trading volume on day  $t$ .); and 3) the standardized demand measure that mitigates the multicollinearity problem (Kleinbaum, Kupper, and Muller [1988](#)). The additional tests based on these measures yield essentially the same conclusions.
- 

## Additional information

### Funding

This work was supported by the IREC, The Institute of Finance and Banking, Seoul National University [IREC, The Institute of Finance and Banking, Seoul National

Related research 

People also read

Recommended articles

Cited by  
8

Information for

- Authors
- R&D professionals
- Editors
- Librarians
- Societies

Opportunities

- Reprints and e-prints
- Advertising solutions
- Accelerated publication
- Corporate access solutions

Open access

- Overview
- Open journals
- Open Select
- Dove Medical Press
- F1000Research

Help and information

- Help and contact
- Newsroom
- All journals
- Books

Keep up to date

Register to receive personalised research and resources by email

 Sign me up

