The paper investigates the statistical properties of the VKOSPI index and if macroeconomic and financial variables can predict the value of the index.

The question the paper asks is not new. Many papers have examined the question in different databases, even if, as noted by the authors only a limited number of contributions have examined emerging markets (by the way is the dataset cleaner than others? are those European/American options? What about the dividend yield to estimate?).

I hope the comments below would help the authors to revise their paper.

Dataset: VKOSPI index is published since April 13, 2009. The index has been recomputed by the authors, in order to extend the sample period from 26 March 2004. As normally the published index undergo many filtering constraints and usually it is computed from intra-daily data, did the author test that their methodology is consistent with the one applied by the Korean Exchange? I suggest to assess the differences between the exchange traded index and their recomputed index from 19 April 2009 on. Moreover the data-set is erroneously recalled in Table 1 (January 2003- Dec 2013), please correct it.

Moreover, it is not clear if the paper uses non-overlapping time periods (Christensen and Prabhala, 2001), if not a method to correct the errors should be used.

Another issue is the timing difference between the Korean and the US market (opening and closing times in day t and day t+1), have those differences been taken into account, in order to have a fair treatment of US and Korean factors?

Even if in principle different loss functions can be used and added to the picture, I would stress that the most important results are those based on the MSE function which is considered as robust to the presence of noise in the volatility proxy (Patton 2010).

There is no clear distinction between the "key model" and the "benchmark model", in Table 4 M6 is called the key model, but in the text (eq. 11) when explaining the DMW test, both "key" and "benchmark" models are recalled. I would not call "benchmark model" the other model(s).

The "key" model, model 6, is chosen according to the adjusted R^2 (adjusted R^2 are pretty high and very similar across models). Based on slight difference the authors conclude that one model is better than the other. No test is conducted in order to see if the difference is significant from a statistical point of view in sample.

In order to assess which is the best model, I suggest also the methods proposed in Hansen (2005).

In Table 4, the Diebold and Mariano test is pursued only between the favourite model (M6) and the others, maybe it could have been pursued also between the other couples of models in order to have a more complete picture of the importance of the different variables used (see e.g. Muzzioli, 2013).

Recent financial crisis: do the results change before and after the crisis? (the estimation period ends just before the crisis (May 22, 2008)).

MINOR COMMENTS:

The writing needs improvement. Edit the paper, spell check. Correct the misprints throughout the paper etc..

I would add a Table with the descriptive statistics of all the series under consideration.

Useful References:

Bandi F.M., B. Perron. 2006. Long Memory and the Relation between Implied and Realized Volatility. Journal of Financial Econometrics 4 (4), 636-670.

Barunik, J., Barunikova, M., 2012. Revisiting the fractional cointegrating dynamics of implied-realized volatility relation with wavelet band spectrum regression, eprint arXiv:1208.4831 [q-fin.ST].

Canina L., S. Figlewski. 1993. The informational content of implied volatility. Review of Financial Studies 6 (3) 659-681.

Christensen, B.J., C. S. Hansen, N.R. Prabhala. 2001. The telescoping overlap problem in options data. Working paper, University of Aarhus and University of Maryland.

Hansen, P.R., 2005. A test for superior predictive ability. Journal of Business and Economic Statistics 23, 365–380.

Hansen, P. R., & Lunde, A. 2006. Consistent ranking of volatility models. Journal of Econometrics, 131(1-2), 97–121.

Giot, P. 2005. Relationships between implied volatility indexes and stock index returns - Are implied volatility indexes leading indicators?, Journal of Portfolio Management, Vol. 31 no. 3, Spr, 92-100.

Muzzioli, S. 2013. The information content of option based forecasts of volatility: evidence from the Italian stock market, Quarterly Journal of Finance, 3 (1), 1350005 (46 pages).

Patton, A. 2010. Volatility forecast comparison using imperfect volatility proxies. Journal of Econometrics. doi:10.1016/j.jeconom.2010.03.034.