## Reply to Comments from Dr. Swinkels

First of all, I am pleased to say thanks to Dr. Swinkels for his kind comments and suggestions.

My replies follow the order in his comments.

## **Replies to Main Comments:**

- The methodology for constructing my indices are described in main texts of the paper, there are not enough space to put the deviations of our methods from existing studies in Tables B and C.
- We evaluated the FSI and FCI by predicting both the output gap and systemic risks (section 4.3.2) in order to conduct a thorough assessment. Therefore, the evaluation approaches on the indices are consistent with the objectives that we develop the indices. In addition, early warning indicator are developed to predict the systemic risks, not for output gap, so they should also be evaluated by predicting the systemic risks.
- Our predicting and early warning window is within 12 or 24 months. Given that our data sample ends at the end of 2012, we cannot predict the "financial stress episode" that occurred in 2015 in China.
- We do notice that other authors and institutions have developed financial indices for China, we have compared ours with some other indices in the main texts, and we will continue this work in our further research.

## **Replies to Other Comments:**

- As I said in the replies to Main Comments, we evaluate the performance of two indices by predicting the output gap and the systemic risks, the results show that the FSI performs better that FSI does in our evaluation tests.
- We calculated the CNFSI for all four financial markets by equal-variance weighting, for sub-FSIs for inter-bank market, stock market, etc, each sub-FSI has its own

estimating method. For Figure 9, for example, the sub-FSI for stock market is

estimated by GARCH (1,1). For detailed econometric technique, please refer to the

References.

• We define the inter-bank risk spread by the difference between the three-month

borrowing rates in China's interbank market and the three-month government bond

rates. This is a universal definition. However, when we calculate equation 1 and

equation 5, we find that the data period for three-month government bond rates is very

short, so we replace it with one-year government bond rate in calculating sub-FSI for

debt market. That we did not choose CDS spread is also because the data period of

CDS spread is very short, which is only available from 2002. Our sample period in

this study is from 1994q1 to 2012q4.

**Replies to Editorial Comments:** 

I doubt that the version of our paper you read is our working paper downloaded from

ECONPAPERS, It's not the version of the discussion paper on Economics E-Journal,

Because I did not find the editorial errors that you suggested. Anyway, we will check

it again.

Thank you very much indeed!

Lixin Sun

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