

## Reply to Referee Report 2

First of all, I'd like to send my thanks to the second anonymous referee for his (her) important comments. We would modify our paper referring to his (her) comments. I reply to the referee report 2 as following.

Replies to the major comments:

- 1 The rapid development of China's financial system and the increasing contributions of China's economy to the global economy suggest that the stability of China's financial system is important not only to China but also to the world. This motivated our study on measuring and monitoring the instability of China's financial system by constructing two indices, a national financial stress index (CNFSI) and a national financial condition index (CNFCI), and a primary early warning system. These two indices both perform well in identifying and predicting China's financial stress episodes according to our evaluation, whereas the former (CNFSI) is better. The primary early warning system including the CNFSI, credit indicator, price indicator, asset indicator, and monetary indicator, would serve as the key tool to China's macroprudential regulation.
- 2 The variables and indicators are defined and discussed in detail in section 4 and Table A in Appendix. We will provide further explanations at the request of you and the readers.

Replies to the minor comments:

1. We conclude that "the CNFSI performs a little better than the CNFCI" in terms of their performance in predicting the output gap based on RMSE in section 4.3.1, and the results of the noise/signal analysis in section 4.3.2. Please refer to Tables 2 and 3.
2. Section 3.1 provides the stylized facts about China's financial system, especially for China's interbank markets, stock markets, foreign exchange markets, and bond markets. These descriptive summaries are the background of our study and closely associated with the measurements of the instability of China's financial system.

3. The order of data sources and the construction methods depends on the authors' preference, which has less impact on the study. In addition, our order follows other literature.
4. The CNFSI and the CNFCI are constructed using different methodologies, so the identifying approaches for the stress episodes are also different. Our identifying approaches refer to many notable papers. Nevertheless, We would like to try if possible; we'd also like to provide more information and explanations.
5. The lag choice was decided by the authors based on three-month-for-one-quarter. We'd like to conduct further diagnostic tests.
6. We have polished our conclusion and would like to conduct further improvements.

Thanks again indeed.

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