**Measuring the instability of China's Financial System:**

**Indices construction and an Early Warning System**

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*Review by Laurens Swinkels*

Summary: The paper develops two indices on Financial Stress and Financial Conditions in China, and describes in detail how these are constructed from source variables. They then aim to predict the output gap with these two constructed indices. Finally, they select four variables that can predict the financial stress indices.

Main comments:

- I like the overview in Tables B and C. (For me that can be part of the literature review instead of the appendix, but as long as the information is there it is fine.) I would also like to see the relevant country that these papers develop FSIs/FCIs for as additional information. And perhaps the time period covered in their empirical analysis, as sometimes methodology or data depend on the availability of high-quality data. It would also be good to mention why the construction of your method deviates from existing studies that you mention in both tables.

- It seems that the FSIs/FCIs are developed to predict systemic risks, but they are evaluated to predict the output gap. That seems a bit inconsistent to me. There might be better predictive variables for the output gap than variables related to systemic financial risk. In addition, the Early Warning System could be tested directly for prediction of the output gap, instead of the FSI/FCI as an intermediate step, if predicting the output gap is really the ultimate goal. How did you determine "No. of Financial Stress in Reality" in Table 3?

- The authors claim that China has not experienced a crisis (page 17, "*Considering the reality that no financial crisis has happened since 1994 in China*, …"). Their data sample ends in December 2012. The post-2012 period would be a good out-of-sample to check the quality of their indicators to measure systemic risks. This could also be a good out-of-sample for the Early Warning System, as the thresholds used in Table 4 seem to be the result of data-mining ("*The optimal thresholds are determined using an iterative search procedure…*").

- Why don't the authors compare their index with the Bloomberg China Financial Stability Index (Bloomberg: CHBGRISK) or the Nomura China Stress Indicator (Bloomberg: NMEICSI)

Other comments:

- From the abstract it becomes not clear what "*perform better*" means. On page 5 "*financial stress index is more fitting"*. I guess it relates to the prediction of the output gap, and not the prediction of financial stress itself. That should be made clearer, although I am not a big fan measuring success of these indicators by predictive ability for the output gap.
- What exactly is 'variance-equal weighting' (page 13)? What is displayed in Figure 9, how is the conditional volatility normalized?
- Why do you use the 3-month Treasury return in Equation (1) and subsequently argue that the 3-month Treasury return is a bad measure (paragraph below Equation 5). This seems inconsistent. In addition: Why not use the CDS spread of the Chinese government as a stress indicator? Data in Bloomberg goes back to 2003 for the 5-year tenor. For the Bank of China it goes back to 2002.

Editorial comments:

- Pg 1: "stability of THE financial system"
- Pg 6: KLR (1998) should probably be written out with author names.
- Pg 14: "in lateR 1998"
- Pg 14: Equation (2) has a square, that should probably be something like ~.
- Pg 15: "China's foreign EXCHANGE market"
- Pg 18: A bit odd to have blue as the first stress colour, I would have chosen yellow myself.
- Pg 22: Numbers should be rounded to, for example, two decimals instead of six.
- Pg 32: YILING need not be spelled in capitals.
- Pg 34: GoldMAN Sachs?