Report on Tao Wang 2nd year paper

Overall, I am very happy with the 2nd year paper. It goes beyond the normal requirements and is a good topic for an entire dissertation. It easily passes the requirements for the 2nd year paper, and I do not need any revision. My comments are intended to help you with the research going forward and specifically for the dissertation proposal:

1. You seem to be saying in a few places on page 16 and page 19 that uncertainty cannot be used to test FIRE. But I don't think that is true. Under FIRE, the revision in uncertainty forecasts for a fixed horizon should be unpredictable. So $\sigma^2_{i,t+1|t+1} - \sigma^2_{i,t+1|t}$ should be orthogonal to anything in the information set at time t. Regressing $\sigma^2_{i,t+1|t+1} - \sigma^2_{i,t+1|t}$ on the lagged forecast revisions, or lagged uncertainty revisions can be used as a test of the FIRE null. And if externally identified shocks that came before time t are correlated with $\sigma^2_{i,t+1|t+1} - \sigma^2_{i,t+1|t}$, that is evidence against FIRE. This is maybe what you mean in footnote 21, but I disagree with "the response of uncertainty cannot be used as a screening device of FIRE" or "it cannot directly be used as a test against FIRE null." Another piece of evidence against FIRE is a fair contribution of the paper.

2. The big thing that needs work, as you know, is how exactly uncertainty will be used to differentiate between sticky expectations and noisy information (and perhaps other rigidities). It may be that you need some auxiliary assumptions to use uncertainty in this way, but your motivation starts out with using uncertainty to differentiate among rigidity models, and so it is disappointing when you don't really do that.

3. You have collapsed the density forecast into just one summary statistic—uncertainty. You could think about whether skewness would have information.

4. Can you consider models of rigidity other than noisy and sticky information?

5. In a couple of places, you make it sound that SPF density forecasts are new, going back only to 2008. This may confuse people who know that the SPF density forecasts go back to 1968. What you mean is that CPI and PCE density forecasts only go back to 2007.

6. You don't seem very careful about what inflation measures are being considered. In the SPF density forecasts, it is core CPI and core PCE. In the SCE, I believe that it is "inflation" in a non-specific sense, which I would interpret as headline. I think that you are treating SCE as if it is forecasting headline CPI, but I missed where it said this explicitly, and there was never any mention of the fact that the SPF density forecasts are core not headline. Also, in computing forecast errors, it would be good to use real-time data for PCE inflation (and CPI, I suppose, but revisions to CPI are trivial).

7. The paper is a tough read for someone who doesn't already know what you are doing. You could take out things like replicating Coibion and Gorodnichenko. Yes, you need to know that you can do this, but having done so writing a page on it just gets in the way of the flow of the paper. You can spend more time talking about what you do that is new. Another example is that you put a set of results in Table 3 that are not explained in a self-contained way. You gloss over interesting results, like that uncertainty and the level of inflation are negatively correlated, when these should be talked about at some length. I may have missed it, but I never saw where you explicitly defined the aggregate $\sigma^2_{s|t}$ as opposed to the individaul uncertainty.

8. The grammar is not bad, but it needs work. You miss a lot of definite articles "the" which is a common problem for people for whom English is not their first language. I would also suggest a slightly larger font and bigger spacing and either putting all Tables and Figures in the text or at the end, but not mixing this.