Referee report:
How Might a Central Bank Report Uncertainty?

Summary
In this article the author discusses a way in which a central bank could report the uncertainty of its forecasts in a world in which it used a single macroeconometric model to make its forecasts and guide its policies. Suggestions are then made as to what might be feasible for a CB to report given that it is unlikely to be willing to commit to a single model. Finally, the author illustrates the framework using a structural multi-country macroeconometric model.

General Assessment
Contribution of the paper: The paper deals with a very important policy question, namely, how central banks should report the uncertainty of their forecasts. The Fed in the release of its minutes reports ranges of its economic forecasts along with central tendencies. However, as the author correctly remarks, these ranges measure differences of opinions among the participants and are not suitable measures of uncertainty of an economic forecast. The author then discusses a way in which a central bank could report the uncertainty of its forecasts in a world in which it used a single macroeconometric model to make its forecasts and guide its policies.

Style/Structure of the paper: The paper is clearly written and structured in a reasonable way.

Overall assessment: The topic of the paper is very important, and I find the proposed framework interesting. Below, I have a few questions/remarks regarding the proposed framework and the empirical illustration and how this relates to what central banks do in practice.

General comments
- Since the topic of the paper is about how central banks should report uncertainty of their forecasts, I lack a bit more discussion of how different central banks in practice report uncertainty. The author uses the Fed and the release of its minutes as an example and motivation. However, other central banks, such as Bank of England and Norges Bank provide more suitable measures of uncertainty for their forecasts. Although, the author mentions the approach of Norges Bank, a more detailed discussion would be beneficial.
- The author argues that central banks do not pay much attention to parameter uncertainty and thus do not take this into account in his bootstrapping procedure. I'm not sure this is entirely correct as many central banks estimate DSGE models or VAR models using Bayesian methods. Bayesian estimation, in general, accounts for parameter uncertainty. - I do not find the empirical example very interesting. First, the MC model is a very large structural macroeconometric model which is not that commonly used by central banks 20-30 anymore. Nowadays most central banks use a DSGE model as their core model. Second, and more importantly, since the MC model is very large and the model is not explained in the current paper, the empirical example does not give much intuition. Thus, I would recommend the authors give an empirical example using a small model, either a small DSGE model or a small VAR model and show how the proposed framework works in practice. It would here also be interesting

to compare the differences of forecast uncertainty of a model that accounts for parameter uncertainty versus a model that do not account for parameter uncertainty.
- Although, most central banks have a core model, they are unlikely to be willing to commit to a single model. The author also mentions this, but I think this could be discussed in more detail. As the data generating process is unknown, it is also important that central banks report forecast uncertainties that incorporate model uncertainty. This can for instance be done by using combination of density forecasts. There is a large and fairly new literature on this, see for instance Aastveit el. al (2014) for an example of combining short-term forecasts or Del Negro, Hasegawa and Schorfheide (2014) for a combination of forecasts from DSGE models.

References:
Aastveit, K., K. Gerdrup, A. Jore, and L. Thorsrud (2014). Nowcasting GDP in real time: A density
combination approach. *Journal of Business and Economic Statistics 32 (1),* 48-68.
Del Negro, M., R. Hasegawa and F. Schorfheide (2014). Dynamic Prediction Pools: An Investigation of Financial Frictions and Forecasting Performance Mimeo