

# Macroeconomic Expectations and Cognitive Noise

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## Abstract

The rational expectations hypothesis cannot explain the seemingly conflicting patterns from recent studies: Consensus forecasts are under-revised while individual forecasts are over-revised. In this paper, I argue that cognitive noise - the unsystematic errors in human judgments - can explain this pattern. In particular, I suppose that noise arises from two sources, one in processing new information and another in remembering old information. I show that modeling two types of noise together is essential in understanding the pattern and in correctly measuring the underlying severity of cognitive constraints. I use the model to estimate the extent of cognitive noise necessary to explain the pattern found in the professional forecasters' projections of the overall U.S. economy.

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