

Bias and Sensitivity under Ambiguity

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*This paper characterizes the effects of smooth ambiguity under imperfect information: from a Bayesian perspective, it amounts to additional sensitivity to signals and a pessimistic bias. This characterization takes a particularly simple form in a general environment that allows for dynamic information, general equilibrium consideration, and time-varying parameters, and it offers a tractable computational method at the same time. On the applied side, we show that ambiguity aversion helps rationalize the empirical distribution of inflation forecast bias and persistence conditional on households' income. We also show that when facing the trade-off between inflation and unemployment *a la* Barro-Gordon (1983), creating certain ambiguity by the policy maker can improve welfare.*