Francesco Bianchi, Duke University and **NBER** Sydney C. Ludvigson, New York University and NBFR Sai Ma, Federal Reserve Board **Belief Distortions and** Macroeconomic Fluctuations (slides) Individualspecific benchmark Ex ante measure of bias, not ex post! Biases: Exist for all

variables Are often persistent **But sometimes** disappear Or often change sign (sic!) Luck vs. bias: the machine also gets recessions wrong in real time —> we can clearly distinguish luck vs. bias Laura Veldkamp comment: it's not really bias, rather "excess forecast

error" b/c it's not

systematically overor under predicting Xavier Gabaix: what model of expectation formation fits this? What do ppl do beyond not being as good as the machine? Over/ or under extrapolate? Survey of Consumers bias is on a scale of [-4,4] (difference between machine and survey respondent forecast) -> that might be a reasonable range for me

Angeletos: machine here is a statistical model of the forecast