

Research Statement

The key theme of my research is understanding the mechanisms through which economic agents process information and learn about the economic environment they inhabit, and how these mechanisms shape macroeconomic dynamics. In my job market paper, I study the role that learning has played in the anchoring of expectations in the post-war period in the US. I find that systematic conduct of monetary policy has shaped agents' expectations in important ways: agents attribute a much larger weight to the Federal Reserve's unemployment-stabilization motives now than they did during the inflation crisis of the 70s-80s period. This has caused private agents to anticipate a weak response from the Fed to shocks in the Phillips curve causing a larger pass-through of perceived cost-push shocks to inflation expectations in the short-run; but this same mechanism also causes their beliefs regarding the Fed's inflation target to respond less to perceived policy mistakes, thus generating anchoring. In a world where the central bank's policy preferences are not ex-ante known and are believed to be evolving, policy-emphasis on keeping the unemployment-gap closed (real-side stabilization) generates long-run anchoring while also magnifying short-run volatility of inflation in response to shocks in the Phillips curve. I demonstrate how a model of learning under micro-founded *structural* reasoning by agents can explain the remarkable stability of the long-run inflation expectations even in the face of large shocks and how the *right* policy behavior generates credibility endogenously and shields the anchor from policy mistakes. I also demonstrate how key structural parameters like the slope of the structural Phillips curve remain poorly identified as agents learn in real-time but anchoring remains robust to mis-measurement.

My research also investigates how behavioral biases shape the way agents interpret economic signals. In a working paper, I uncover a striking negative correlation between the response of Treasury yields to FOMC announcements and their response to the release of the corresponding minutes, with the effect concentrated at medium-term maturities. A factor-model decomposition suggests that markets tend to overreact to forward guidance embedded in announcements, only to revise these expectations once the minutes provide additional context. To account for this pattern, I develop a model of diagnostic expectations, which formalizes how agents overweight salient information at first and subsequently adjust. This evidence illustrates that agents do not treat all central bank communications alike; instead, their responses reveal what information they perceive each signal to contain.

Going forward, I seek to explore frictions in how agents acquire information under cognitive constraints building on the rational inattention literature and adapting that to a learning environment. I am particularly enthusiastic about using insights from the Machine Learning literature, particularly how attention is modeled (attention networks) and incorporate them into models of economic behavior and real-time learning in a way that allows for structural interpretation of the attention mechanism.