Prajyna P. Barua

Email | LinkedIn

+1 201-850-9213

My research lies at the intersection of macroeconomics and labor economics, with specific focus on understanding the dynamics of the U.S. labor market. In particular, my research focuses on examining the factors affecting the shifts in the U.S. Beveridge Curve both at aggregate and industry level and contribute to the growing literature of labor market frictions and labor market flows. My primary research area is empirical macroeconomics and time series analysis, with secondary focus on Bayesian econometrics and econometrics. In general, my research approach is guided by asking straightforward questions—because even the simplest questions often demand deep analytical thinking and sophisticated empirical methods.

My dissertation consists of three chapters. My first chapter is my job market paper, titled '*Estimating time-variation in matching efficiency and match elasticity for the US labor market*' where I understand how labor market frictions evolved over time for the U.S. non-farm sector. In the paper, I estimate the time varying matching efficiency using state space model. I find evidence for significant time variation in matching efficiency which experienced a gradual decline, indicating growing labor market inefficiencies. I find matching efficiency to be pro-cyclical which can be attributed to increased reallocation of workers between industries and higher composition of non-degree wokers in the unemployed pool during the Great Recession. I find evidence of increased reallocation due to structural changes in the economy. I contribute to the literature by finding evidence of explaining matching efficiency using CPS data. For COVID-19, these factors were not significant. I also estimate unemployment gap using models with and without time variation and find counter intuitive gaps when time variation is not accounted for. Therefore my paper provides new insights on the shifting of the Beveridge Curve and highlights the importance of incorporating the micro-level data into macro-labor models.

Second chapter is titled '*Estimated ouput gap in a wage-inflation expectations model*' is