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Title: Supply and Demand Shocks Implied in a Business Survey (preliminary)

Abstract:

We develop a method for estimating real growth and inflation rates implied in a business survey. We apply it to data from the Short-Term Economic Survey of Enterprises in Japan (*Tankan*) spanning from 1974 to 2022 across 31 industries. Supply and demand shocks are identified by applying the method of Bekaert *et al.* (2022) to the implied growth and inflation rates. The effects of each shock on activity and inflation in each industry are then examined. The majority of industries exhibit statistically significant increases in inflation in response to a negative supply shock and a positive demand shock, and statistically significant increase in growth rates in response to positive supply and demand shocks. We employ a structural vector autoregression (SVAR) model to analyze how shocks spread across industries and across firms of different sizes. Our findings reveal that positive supply shocks in upstream industries and positive demand shocks in downstream industries generally cause inflation to fall in downstream industries and rise in upstream industries, respectively. An analysis of contagion among firms of different sizes suggests that demand shocks are more likely to spread to firms of different sizes than supply shocks. A comparison of our results to those using the proxy SVAR confirms the robustness of our analysis.

Keywords: uncertainty, supply/demand shocks, diffusion index, business survey, spillover