Unsurprising Shocks: Information, Premia, and the Monetary Transmission

CFM-DP2016-13

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Recent advances in the identification of monetary policy shocks have proposed the use of market-based surprises as external instruments in Proxy SVARs to back out the contemporaneous transmission coefficients that link the structural shock of interest to the reduced-form VAR innovations. Two crucial assumptions make futures-based surprises the ideal candidates for the role: (i) it takes longer than the measurement window for the monetary policy shock to modify the premium; and (ii) the information set of the central bank and that of market participants coincide. These assumptions make it possible to first map all price updates into revisions in expectations and, second, to effectively interpret these announcement-triggered revisions as the monetary policy shock, up to scale and a random measurement error.

This paper produces evidence that challenges both these assumptions, and argues that both time-varying risk premia and informational asymmetries are likely to pollute the measurement, thereby casting doubts on the exogeneity of the resulting proxies. Consequences for the estimation of the IRFs are shown to be dramatic, both qualitatively and quantitatively. The paper then proposes a new set of proxies that are orthogonal to both central banks’ and market participants’ information sets. The latter component of the conditioning set is intended to fulfil the requirement that the proxy be a measure of changes in expectations not contaminated by a time-varying risk premium. The necessity of conditioning on central banks forecasts is crucial to make sure that what’s being captured is the monetary policy shock, and not a news shock resulting from market participants trying to infer the inputs of the central bank reaction function from the policy rate decision.

Results on both the US and the UK show that identification of monetary policy shocks via the orthogonal proxies retrieves contemporaneous transmission coefficients that are in line with macroeconomic theory even in small, potentially informationally insufficient VARs.