Identification of Shocks from Unconventional Monetary Policy Measures

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Abstract : After several prominent central banks including European Central Bank (ECB), Federal Reserve System (Fed), Bank of Japan and Bank of England employed unconventional monetary policies in the aftermath of the financial crisis of 2008-2009 the problem of identification of the effects from such policies became of great interest. One of the main difficulties in identification of shocks from unconventional monetary policy measures in structural VAR analysis is that they often are anticipated, which leads to a non-fundamental MA representation of the VAR model. Moreover, the unconventional monetary policy actions may indirectly transmit to markets information about the future stance of the interest rate, which raises a question of the plausibility of the assumption of orthogonality between shocks from unconventional and conventional policy measures. This paper offers a method of identification that takes into account the abovementioned issues. The author uses factor-augmented VARs to increase the information set and identification through heteroskedasticity of error terms and rank restrictions on the errors' second moments' matrix to deal with the cross-correlation of the structural shocks.

Keywords : factor-augmented VARs, identification through heteroskedasticity, monetary policy, structural VARs

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