

Unconventional Monetary Policy of the European Central Bank and Volatility Spillovers to Poland

The aim of the paper is to investigate time-varying volatility spillovers (i.e. contagion effects) between the monetary policy stance of the European Central Bank and the monetary and financial conditions in Poland. We focus predominantly on the changing patterns (a qualitative change) in the response of the Polish economy to increasingly expansionary policy in the EMU. In order to assess the magnitude of volatility spillovers, we employ a class of multivariate GARCH models with dynamic correlation coefficients. The models are estimated using weekly time-series on money market interest rates, bond yields, and exchange rates. The monetary policy of the ECB is approximated by the so-called shadow interest rate measure proposed by Krippner (2012) which takes into account various non-standard measures (e.g. quantitative easing). We then perform event study regressions including several dominant announcements and actions by the ECB. Conditional correlation series are also assessed for multiple structural breaks. The findings of the paper lead to the conclusion that volatility spillovers from the ECB's unconventional policies (as approximated by the shadow interest rates) to the Polish economy were almost non-existent or at best uncertain in the entire period of 2005-2018. Likewise we document a relatively weak evidence on structural shifts in this correlation structure after 2009. More pronounced effects were identified only for long-term interest rates, and only before 2012, as a reaction to Securities Market Programme and 3-year Long-Term Operations. Contrary to some studies that employ univariate methods, no significant shifts in these relationships associated with the implementation of cutting-edge unconventional tools (such as negative interest-rates or asset purchase programmes) were found.