The impact of the ECB’s asset purchase programmes on sovereign bond spreads in the euro area

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Abstract

This paper estimates the impact of the European Central Bank’s asset purchase programmes on sovereign bond spreads in the euro area between 2008 and 2015 using a country-by-country GARCH specification. Starting from the consumption-based asset pricing model, the determinants of sovereign bond spreads including the monetary policy transmission channels of the central bank are first derived in theory. The baseline estimates are rigorously diagnosed for misspecification and subjected to a wide range of sensitivity tests. Among others, changes in the dependent variable, the independent variables and the number of (G)ARCH terms are tested. Moreover, the model is applied to subsamples and dynamic conditional correlations are analyzed to estimate the effects of the asset purchases on spread contagion. Generally, it is found that the asset purchase programmes triggered a reduction of sovereign bond spreads. More specifically, the Securities Markets Programme (SMP) had the most significant immediate effects on sovereign bond spreads across the euro area. The announcements related to the Outright Monetary Transactions (OMT) programme also yielded substantial spread compression in the periphery. In contrast to that, the most recent Public Sector Purchase Programme (PSPP) announced in January 2015 and implemented since March 2015 had no significant immediate effects on sovereign bond spreads, except for Irish spreads. Hence, immediate effects seem to be dependent upon the size of the programme, the extent to which it targets distressed sovereigns and the way in which it is communicated.