Summary for non-specialists
Economic Papers No. 519 / June 2014
Economic Papers index

International Capital Flows and the Boom-Bust Cycle in Spain

Jan in't Veld, Robert Kollmann, Beatrice Pataracchia, Marco Ratto, Werner Roeger

This paper provides a quantitative analysis of the joint dynamics of the trade balance and real activity in Spain, the largest of the Euro Area countries that received sizable capital inflows after the creation of the Euro, and then experienced a sudden stop. We do so using a three-country New Keynesian Dynamic Stochastic General Equilibrium (DSGE) model consisting of Spain, an aggregate of the Rest of the Euro Area (REA) and an aggregate of the rest of the world (ROW). We estimate the model using quarterly data for Spain, the REA and the ROW during the period 1995Q1-2013Q2. The Spanish block of the model has a rich structure that allows us to capture the key features of the Spanish boom-bust cycle. In particular, we assume a construction sector and a government sector; Spanish households and non-financial firms face collateral constraints (as, e.g., in Kiyotaki and Moore (1997)). The model assumes demand and supply shocks in goods, labour and asset markets, as well as nominal price and wage rigidities. We use the model as a laboratory for quantifying the key drivers and transmission mechanisms that have affected the Spanish economy since 1995.

The creation of the Euro eliminated intra-Euro Area currency risk and led to a convergence of Spanish interest rates to the lower interest rates in the REA. Two other competing explanations for the boom in the Spanish economy are loosening credit conditions and asset bubbles. We find that all these factors fuelled a sharp rise in Spanish investment and house prices, and increased the fragility of the balance sheets of Spanish households and non-financial firms. During the global financial crisis, a fall in Spanish asset prices, and a tightening of collateral constraints, led to a sharp reduction in capital flows to Spain, and to a persistent fall in Spanish residential and non-residential investment and output. The credit crunch was especially pronounced for Spanish households. Firm credit constraints tightened later, and more gradually. Our analysis thus highlights the key role of domestic asset bubbles (explained in the model by exogenous asset risk-premium shocks) for the Spanish boom-bust cycle.

During the aftermath of the global financial crisis, Spanish real house prices continued to fall, while equity prices stabilized after 2010. Household deleveraging during this period has been achieved through a fall in residential investment, while aggregate consumption as a share of GDP has remained comparatively stable. The tightening of firm credit constraints during the aftermath of the global crisis was partly off-set by a fall in the risk-premium on production capital. During the Spanish sovereign debt crisis, foreign private lending to Spain fell sharply—however, credit to Spanish households and non-financial firms was stabilized through the massive substitution of foreign private lending by central bank lending. The recovery of the world economy and increased productivity growth in Spain also contributed to the trade balance improvement, in the aftermath of the global financial crisis.