ESSAYS ON MONETARY POLICY, LOW INFLATION AND THE BUSINESS CYCLE

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General Overview

The last ten years have been extremely challenging for both researchers in monetary economics and policymakers. The Global Financial Crisis of 2007–2009, in spite of its size and severity, was initially widely perceived in the Euro Area (EA) as an imported and transitory crisis: it was frequently predicted that the EA economy would recover once the US and the World Economy rebounded. Instead, after a brief period of recovery, the Euro Area was hit by the Sovereign Debt Crisis of 2011-12, a domestic crisis which widened the divide already existing between core and peripheral countries up to the point of threatening a break-up of the euro. Thanks to the bold monetary policy response of the ECB this fear gradually vanished, but the sudden fall in oil price and the uncertain economic outlook led to the low inflation period, particularly severe in the EA, in which inflation, both in terms of headline and core measures, is well below the ECB target of 2%. This prompted the ECB to launch its Quantitative Easing program, at the beginning of 2015, much later than what the FED implemented to offset the impact of the 2007–09 crisis.

This dissertation consists of two different but interlinked parts, which contribute to the empirical literature on monetary policy, low inflation and the business cycle. The first part is composed by Chapters I and II, and it is devoted to analyse the EA economy, both before the Global Financial Crisis and during the most recent low inflation period. The second one, composed by Chapters III and IV, focuses on the US economy to evaluate the possible negative consequences of the extraordinary monetary stimulus undertaken by the FED. In particular, we study the risks for both price and financial stability of the effects of the so called lift-off, i.e. the gradual normalization of monetary stance.

In the first Chapter, we provide novel evidence on the different effects of the ECB common monetary policy on euro–area core and peripheral countries even before the eruption of the crisis. We estimate a structural dynamic factor model on a large panel of Euro Area quarterly variables to take into account both the comovement and the heterogeneity in the EA business cycle, and we then simulate the model to investigate the possible existence of asymmetric effects of ECB monetary policy on member states’ economies. Data stop before the eruption of the Global Financial Crisis in order to only assess conventional monetary shocks, which are identified by means of sign restrictions. Although the introduction of the euro has changed the monetary transmission mechanism in the individual countries towards a more homogeneous response, we find that differences still remain between North
and South Europe in terms of prices and unemployment. These results are the consequence of country-specific structures, rather than of European Central Bank policies.

In the second Chapter we use a Bayesian VAR model to analyse the transmission of global and domestic shocks in the euro area, with a particular focus on the drivers of inflation, especially in the recent period labeled as low inflation. We identify several shocks by means of sign restrictions, and we account for the role of ECB unconventional monetary policies by using a shadow interest rate. We document that the recent low inflation phase was not entirely attributable to falling oil prices, but also to slack in economic activity and to insufficiently expansionary monetary policy, because of the Zero Lower Bound of interest rates. Interestingly, we show that the launch of the ECB Quantitative Easing turned the monetary stance into more accommodative, preventing deflationary outcomes.

In the third Chapter we provide an empirical evaluation of the existence of a "dark side" of monetary policy, i.e. the possibility that credit spreads abruptly rise following a monetary tightening, after being compressed by an extraordinary period of monetary easing. This would create a problematic trade-off for the central bank, as temporary monetary expansions might at once stimulate the economy and sow the seeds of abrupt and costly financial market corrections in the future in terms of risks for financial stability (Stein, 2014). We investigate this possibility using data for the US by exploiting non-linear methods to examine the propagation of monetary shocks through US corporate bond markets. Across different methodologies, we find that the transmission of monetary shocks is mostly symmetric. What is asymmetric is instead the impact of macroeconomic data releases: spreads respond more to bad news. Crucially, these responses anticipate economic slowdowns rather than causing them directly. However, empirical evidence points to the possibility of larger effects of expansionary monetary shocks depending on (i) the type of non-linear estimation technique (ii) the identification of the shock and (iii) the inclusion of unconventional measures in the analysis.

Finally, in the fourth Chapter, we ask whether the FED has riskily delayed the exit from its large monetary easing, increasing the probability of a future inflationary burst. We do so by means of medium and larger scale Bayesian VAR, which we use for both structural analysis, i.e. the evaluation of monetary policy shocks, and forecasting, i.e. the running of counterfactuals and scenario analysis. We show that expansionary monetary policy did not trigger a large deviation of inflation from its steady state. Furthermore, the FED monetary stance is totally in line with the concurrent macroeconomic dynamics. Last, our model predicts that US core inflation will lie well below its 2% target in 2017, a finding only recently acknowledged by the FOMC projections.