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Thesis title: “Unconventional monetary policies”

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Abstract

This thesis investigates the issues related to unconventional monetary policy implementation and is organized in four chapters. Chapter 1 compares unconventional monetary measures in the United States (2007-2010) with the first big-scale unconventional experience in Japan (1999-2006). First, we discuss the way non-orthodox measures were implemented by the Fed and the Bank of Japan (BOJ) and we argue that the U.S. unconventional balance-sheet management was “asset-driven” whereas the Japanese “liabilities-driven”. Second, we investigate the impact of non-standard measures on the private banks' balance sheets, and in particular on lending to other banks, companies and households. The interbank lending slowed down in both countries but in the U.S. to much bigger extent. On the contrary, lending to companies diminished more in Japan as there was double deleveraging process in firms and financial institutions. Third, we discuss the empirical evidence for the effectiveness of the Fed and BOJ unconventional monetary policies. In Japan “policy duration effect” contributed to lowering long-term yields, whereas in the U.S. the portfolio rebalancing effect proved more effective. Finally, we discuss risks connected to unconventional policies. While inflation does not seem to be immediate danger, the important credit risk on the Fed's balance sheet brings up concerns about overstepping into fiscal policy and threatens the Fed's independence. On the other hand, the reluctance of the BOJ to employ credit and quantitative easing more aggressively undermined its effectiveness in countering deleveraging pressures and deflation.

Chapter 2 evaluates empirically the impact of unconventional and conventional monetary policies in the United States on the Libor-OIS spread, long-term interest rates and long-term inflation expectations. To this purpose we investigate the behavior of selected asset yields on the days of monetary policy announcements. We find that liquidity facilities had weak impact on three-month Libor-OIS spread. The QE1 purchases of longer-term Treasury securities and agency debt/MBS lowered nominal long-term interest rates. Furthermore, we find evidence that the Fed's rescue operations and QE2 raised long-term inflation expectations. We also consider the impact of fiscal policy announcements. We find that the government bailouts reduced the three-month Libor-OIS spread while the fiscal stimulus announcements raised long-term inflation expectations.

Chapter 3 investigates the effect of the ECB unconventional monetary policies on banks' and governments' borrowing costs in the euro zone via event-based regressions. Specifically, we measure the response of money market, covered-bond and sovereign-bond spreads on the days of monetary policy announcements. The results show that among the ECB unconventional measures, long-term sovereign bond purchases (SMP) proved the most effective in lowering longer-term asset yields. The effects are the most important for the sovereign spreads in the periphery euro-zone countries. The strong impact in the euro zone, exceeding the impact of similar measures in the U.S. and the U.K., suggests that the central bank intervention in sovereign market is particularly effective when the sovereign risk is important. The SMP also diminished the longer-term refinancing costs for banks, as represented by covered bond spread reduction. Furthermore, covered bond purchase programs (CBPP 1 and 2) reduced the spreads on all markets studied: covered bond spreads, sovereign bond spreads and to some extent the money market spreads. The 3-year LTRO announcement on the other hand was effective in reducing bank refinancing cost, via smaller money market spreads and covered bond spreads, but did not result in smaller government borrowing costs.

Chapter 4 incorporates a small and time-varying “disaster risk” à la Gourio (2012) in a New Keynesian model in order to account for increase in risk premia that motivated unconventional monetary interventions. In our model, a small change in the probability of disaster may affect macroeconomic quantities and asset prices. In particular, a higher disaster probability is sufficient to generate a recession without effective occurrence of the disaster. By accounting for monopolistic competition, price stickiness, and a Taylor-type rule, this paper provides a baseline framework of the dynamic interactions between the macroeconomic effects of rare events and nominal rigidity, particularly suitable for further analysis of conventional and unconventional monetary policy.

This thesis emphasizes the diversity of unconventional monetary strategies and the importance of country-specific characteristics for their design and effectiveness. We conclude that direct long-term asset purchases have important effect on long-term interest rates reduction, especially in the presence of high country default risk. The government bond purchases seem to have an impact on inflation expectations as long as the monetary base increase is perceived to be permanent. The impact of quantitative easing on inflation expectations should be however investigated further taking into account the U.K., the euro-zone data, as well as the newest evidence from the United States (QE3 and Operation Twist) in order to determine more precisely the conditions under which large-scale asset purchases have an impact on inflation expectations. We also find that liquidity provisions had only small impact on interbank market strains. We conclude that the central banks took the role of interbank intermediation making interbank market less relevant for the bank refinancing. The future research is needed in order to determine whether liquidity provided to banks was further lent

to companies and households and whether the low interest rates were passed on to banks' customers. Finally, we built a New Keynesian model that accounts for agents' perception of higher disaster probability which leads to self-fulfilling recession. This is a privileged framework to evaluate efficacy of unconventional monetary policies and we plan to compare different unconventional measures in term of welfare gains (losses) in our further research.