



**University of
Zurich^{UZH}**

Department of Banking and Finance

Chair Corporate Finance Prof. Dr. Kjell G. Nyborg

Master Thesis

Unconventional Monetary Policy and Covered Bonds

Written by:	Simon Frei
Supervised by:	Philipp Lentner
Submission Date:	October 2 nd , 2017

Executive Summary

The Subprime crisis and the following European sovereign debt crisis left the economies in the euro-zone periphery with far higher bond yields than core euro-zone economies. Not only the government bond yields showed big differences across countries, yields on financial institutions refinancing markets like the covered bond market featured big differences in yield, based on the country of the debt issuer. Apart from market inefficiencies and illiquidity in the banking system, the high spreads can be explained with big positions of government debt on banks' balance sheets, leading to a strong feedback loop between banking system and government risk. The European Central Bank, having already depleted most of its conventional monetary policy arsenal, responded by applying unconventional monetary policy, aimed at reducing spreads over German government yields in the euro zone.

This thesis extends the literature focused on researching asset price reactions as a response to such ECB policies, by analyzing the impact of ECB announcements of unconventional monetary policy on covered bond spreads. It is split up into three parts: first, I conduct a literature review aimed at providing possible explanations for the different yield reactions in core and periphery economies. The second part empirically tests the covered bond spread response of different countries inside the euro zone to announcements of ECB policy, using an event-based regression approach. The third part changes the focus from varying reactions across countries to research possible differences in reaction to ECB policies within countries, based on the covered bonds having a high or low average spread.

The literature review comes to the conclusion that especially the two most important ECB measures deployed in 2010 and 2012 respectively, the Securities Markets Programme and the Outright Monetary Transmission, focused mainly on decreasing default premia, liquidity premia and market segmentation inside the euro zone. Those yield components are all country dependent, as several authors have shown, and vary strongly among euro-zone members. Therefore, it is not surprising that the differences in spread reactions after those two measures were the most pronounced. For other, especially more recent, unconventional monetary policies, the targeted yield components were less country specific and the measured spread reactions therefore differed less across core and periphery economies.

In the second part of the thesis, I replicated the results of the literature review, which were mostly measured on government bond spreads, on covered bond spreads. Using the setup of

Szczerbowicz (2015) and stretching the time series analyzed until the end of 2016, I find significantly stronger reactions of covered bond spreads over the German government yield in periphery countries of the euro zone, compared with core countries. The empirical results further show the difference in reaction being heavily dependent on the individual ECB policy applied and its objectives. The findings confirm the literature consensus that the SMP, its reactivation and the OMT have the most variance in spread reaction across the euro-zone members. Another insight from testing for different event windows hints at delayed reactions for some policy announcements, the Covered Bond Purchase Programmes 1 and 2, while most other announcements seem to be fully incorporated into yields on the day of the event.

In the third part, the objective changed to empirically test for different spread reactions within countries. For this purpose, I gathered spread information for individual covered bonds, active between 2009 and 2016 and sorted them into two baskets per country, separated by average covered bond spread. Then, the same event-based regression from part two was applied to the baskets to observe, if covered bonds with higher spreads react stronger to ECB announcement than low spread covered bonds. Due to data restrictions, the analysis could only be conducted for Germany, France and Spain. For Germany and France, there were no consistent differences to be detected between the two baskets. For Spain, the high spread basket reacted significantly stronger to most of the unconventional monetary policy announcements, supporting the hypothesis that weaker covered bonds profit more from ECB policies, even within the same country.