Executive Summary

Since the Financial Crisis of 2008 and the Sovereign Debt Crisis of 2011 central banks around the world employed Unconventional Monetary Policies (UMP) to fight tensions in funding markets of banks, to stimulate the economy, and to raise inflation. The UMP of the European Central Bank (ECB) studied in this master's thesis consists of purchase programs, extensions of the collateral framework, fixed-rate-full-allotment for repurchase agreements, and maturity extension of repurchase agreements. These measures were used heavily: The purchase programs reach a combined value that is comparable to the GDP of larger European countries. The same is true for the amounts tendered in repurchase agreements. For the extension of the collateral framework it is documented that it lead to an increase of eligible collateral of 62% from 2006 to 2012 - a nominal value of around EUR 5 trillion. At the same time governments in the Euro-Area have curtailed spending and are therefore issuing less debt.

Most studies regarding the effects of UMP on trading behavior of government debt have focussed on the impact on asset prices, yields, yield spreads, yield volatility, etc. This master's thesis aims to shed light on the long-term impact of UMP on market-turnover of government debt. Despite its potentially far-reaching consequences and contemporary importance, this relationship has only been given very limited attention. This master's thesis tries to fill that gap.

Based on statements from the literature, several hypotheses concerning the impact of UMP measures are developed in this thesis. In particular, it is hypothesised that the switch to fixed-rate-full-allotment for repurchase agreements lead to an increase in market-turnover of sovereign debt ($H1$), that purchase programs that aim to buy government bonds and long-term LTROs lead to a decrease in market-turnover of sovereign debt ($H2a$ and $H3$ respectively), that purchase programs that aim to buy non-government assets lead to an increase in market-turnover of sovereign debt ($H2b$), and that extensions of the collateral framework lead to a decrease in turnover of previously eligible (high-quality) collateral ($H4$) - which is mostly government debt. All in all, the hypotheses lead to conclude that UMP lowers the depth of one of the most important financial markets - the market for sovereign debt.

After providing an overview over the behavior of market-turnover of government debt for several European countries and maturity segments, the master's thesis discusses UMP and documents, how UMP is employed. Due to the nature of UMP and the aim of the master's thesis to analyse the long-term effect of UMP on turnover, a regression based on period-dummies is selected. The observation period is therefore split into 13 distinct time-periods based on the ECB's UMP. The hypotheses are then attributed to the different time-periods. Obfuscating the analysis is the fact that for some periods multiple hypotheses with contrary predictions apply. It is found that the hypotheses have no power in describing the behavior of turnover.

By looking at the time-series of turnover together with the selected time-periods, one notes that there are idiosyncratic, country-clustered, and Euro-wide effects in the time-series that are not related to UMP and that outweight any potential long-term effects that could stem from UMP. A short analysis of the time-series together with related literature indicates that these effects mainly result from the attractiveness for intermediaries to provide a market. In other words, when it is attractive to provide a market turnover is high and when it is not attractive turnover evaporates. Literature suggests that differences in the turnover level between countries are explained by differences in the obligations levied on primary dealers and that in-country time-series behavior is mainly a result of transaction costs which are themselves impacted by funding-costs and risk-bearing capacities of market-makers.