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Macroannouncements, bond auctions and rating actions in the European government bond spreads☆

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ABSTRACT

This paper investigates the impact of macroannouncements, government bond auctions and rating actions on the 10-year government bond spreads for Belgium, France, Italy, the Netherlands, Spain with respect to Germany. Using a unique tick-by-tick dataset over 1/02/2009–05/31/2012, we identify the impact of the three drivers via jump and cojump detection procedures. Disentangling the pre-from the post-announcement effects, real economy and forward looking news releases from US and Euro area, country specific Spanish and German macroannouncements, and auctions hold in distressed countries such Italy and Spain have a statistically and economically significant effect. No role is played by rating actions.

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Europe is under stress and integration among European countries seems more fragile than ever. Starting from the subprime crisis in 2007, markets are more aware of the differences between European countries, and this sentiment is reflected, amongst others, in increasing differentials of government bond yields. In 2008 and 2009, government bond spreads became sizable but it was in 2010 and 2011 that spreads substantially increase, reaching levels even higher than those experienced in the pre-Euro era. It was just after the famous Mario Draghi's "whatever it takes" in July 2012 that a more normal situation on government bond markets was restored. The European sovereign debt crisis involving, although at different extents, all the peripheral countries have questioned the much celebrated markets' self-regulatory power as well as the ability of policy makers and regulators to adopt stability measures and stimulate economic growth. Thus, understanding which factors drive sovereign risk is particularly timely also for the macroeconomic consequences of the comovements associated to these factors. For instance, higher spreads deteriorate borrowing capabilities and market confidence which simultaneously impact on consumption and investment. The way to ameliorate the effects of the crisis on the real economy is a current political debate but the recipes to be put in place still need to be fully understood.

In this paper, we identify the role that market movers like macroeconomic announcements, government bond auctions and rating actions have in driving government bond markets, and whether the occurrence of specific events in a country affects other European countries. To this aim, we make use of a unique dataset of high frequency data on 10-year European government bond spreads. Moreover, we analyze the impact of the three drivers on both conditional mean and variance specifications, disentangling the pre-from the post-announcement effect. The econometric analysis is conducted using recent developments in the financial econometrics literature on jump and cojump detection procedures.

In the literature, the relationship between macroannouncements and returns is widely studied while the sensitivity of jumps is analyzed in a handful of papers such as Dungey et al. (2008), Lahaye et al. (2011) and Jiang et al. (2011). In particular, Lahaye et al. (2011) estimate jumps and cojumps at intradaily frequency mapping them to macro news to find that bond markets are the most sensitive to news releases and that macroannouncement surprises are associated with cojumps even more consistently than jumps. Lahaye et al. (2011) point out the advantage of using very high frequency data to study the impact of such events. On the other hand, Jiang et al. (2011) conclude that although a majority of jumps occurs at prescheduled news announcement times, surprises related to macroannouncements have limited power in explaining bond price jumps. Moreover, authors show that liquidity shocks play a key role in explaining jumps and that usually, during the preannouncement period, it is possible to observe a drop in market depth. (Jiang et al., 2011) explain this result as that, as also discussed in (Fleming and Piazzesi), dealers tend to withdraw orders and place them further out to avoid being picked off in the upcoming information event. Thus, authors conclude that jumps observed in correspondence to macroannouncement releases are not only determined by news, but also by the drop in liquidity that is a market mover per se.

As far as government bond auctions are concerned, we refer to (Fleming and Remolona, 1997) where the impact of US treasury auctions on returns is assessed. (Fleming and Remolona, 1997) compute the "surprise" effect as the difference between the yield in the when-issued market with the actual ex-post yield without relevant findings.

Finally, although rating actions are expected to be an important determinant of spreads, as creditworthiness represents the long-term sustainability of countries' debt, the role and reliability of credit rating agencies (CRA) has been under investigation. In addition to concerns on CRAs effective capability to give accurate risk assessments, there is a sustained debate about the timing of recent downgrades of European sovereigns claimed to promote uncertainty in financial markets: see for instance (Akdemir and Karsli, 2012), (Alsakka and Gwilym, 2012), (Alsakka and Gwilym, 2013), (He et al., 2012) and (Opp et al., 2013). In terms of the impact of rating actions, (Afonso et al., 2012) reports that ratings are systematically related to daily movements in sovereign bond spreads, to budgetary developments, and that rating actions are not anticipated at 1–2 months horizon; in addition, authors show the existence of spillover effects, especially from lower rated countries to higher rated countries, as well as of persistent effects for recently downgraded countries. In our analysis, we consider also S&P, Moody's and Fitch separately to measure the distinct impact of the three rating agencies motivated by the