Journal of International Money and Finance 60 (2016) 114–150

Contents lists available at ScienceDirect

Journal of International Money and Finance

journal homepage: www.elsevier.com/locate/jimf

# Global corporate bond issuance: What role for US quantitative easing? ☆

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ARTICLE INFO

*Article history:*
Available online 21 July 2015

*JEL Classification:*
E52
E58
F42
G15

*Keywords:*
Monetary policy
Quantitative easing
Spill-overs
Bond issuance
Federal Reserve
Emerging markets

ABSTRACT

The paper analyses the link between global corporate bond issuance and US quantitative easing (QE). It finds that purchases and holdings of MBS and Treasuries by the Fed have a strong impact on gross corporate bond issuance across advanced and emerging economies. The results are robust to a large number of checks, including controlling for the reduced supply of domestic and international bank loans in the aftermath of the global crisis which might have induced the corporate sector to issue more bonds. Our results support the "gap-filling" theory (Greenwood et al., 2010) where corporate bonds replace the assets removed from the market by large scale asset purchases. Specifically, asset holdings and purchases crowded out investors from the markets where the Fed intervened and accelerated portfolio rebalancing across assets and countries leading to stronger corporate bond issuance across the globe. A counterfactual analysis shows that bond issuance in emerging markets since 2009 would have been halved without QE.



☆ Ariadna Vidal Martínez was at the ECB when the main results of the research were obtained. The authors would like to thank an anonymous referee, participants in an internal ECB seminar, in an internal IMF seminar, in the XI Emerging Markets Workshop organised by the Bank of Spain, the 2014 EMG/ECB "Emerging Market Finance" Conference, the 18th ICMAIF. In particular, we wish also to thank B. Vasiceck, R. Horvath, R. McCauley, P. Turner, C. Rebillard for helpful comments. The views presented in the paper are those of the authors and do not necessarily represent the views of the European Central Bank or the Eurosystem.
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http://dx.doi.org/10.1016/j.jimonfin.2015.07.013
0261-5606/

## 1. Introduction and motivation

Since late 2008 major central banks have entered into unchartered territory by adopting unconventional monetary policies (or quantitative easing programmes – QE) to repair the transmission mechanism and to provide monetary accommodation at the zero lower bound.[1]

Despite a lively debate in international *fora* on the global implications and risks of QE policies, especially in relation to excessive capital flows to emerging markets,[2] a little but growing body of research has been devoted to the international spill-overs of QE.[3] Understanding the international spill-overs of these policies is particularly relevant at the current juncture as one of the major central banks, the Fed, is tapering its large quantitative easing programme.

This paper contributes to the literature on the international spill-overs of quantitative easing by quantifying the impact of the Fed's policies on global bond issuance in the non-financial sector. Along our same thread, Fratzscher et al. (2013) analyse the impact of the Fed's Large Scale Asset Purchases (LSAP) announcements and purchases on global financial markets and capital flows, differentiating between emerging markets and advanced economies. They show that QE played a role in driving portfolio flows to emerging markets and had a large impact on global asset prices. Other event studies document large international spill-overs of QE announcements to asset prices (Neely, 2010; Bauer and Neely, 2014; IMF, 2013a; Rogers et al., 2014; Bowman et al., 2014), while Hattori et al. (2013) show that QE announcements and operations reduced global tail risk.[4] Only few recent studies focus on global bond markets and this is the gap this paper aims at filling in the literature. McCauley et al. (2014) can be seen as complementary to our analysis, as it focuses on bond issuance denominated in dollar and uses a different modelling strategy which entails different transmission channels of QE to bond markets. Another exception is the work by Gilchrist and Zakrajsek (2015) that finds that quantitative easing policies have significantly lowered yields on corporate bonds for non-financial firms, although their analysis is restricted to corporate bond yields in the US.

In the last four years, global bond issuance increased markedly, especially in the non-financial corporate sector (Caballero et al., 2014; Shin, 2013; Turner, 2014), while credit spreads shrank worldwide to levels similar to those prevailing in the 2005–2006 period of "financial exuberance". Fig. 1 shows that volumes of gross corporate bond issuance in emerging markets after 2009 were simply unprecedented in history and bond issuance activity in advanced economies was also high according to historical standards.

Fig. 2 shows that gross corporate bond issuance was strongly synchronised across a large sample of advanced and emerging economies[5] since 2009, with issuance in the highest quartile almost everywhere in 2012. This suggests that bond issuance volumes can be explained by common factors rather than by country/firm specific factors.

Therefore, the timing and the synchronisation of bond issuance across countries point to a possible role of QE policies in driving these developments. There are several reasons why QE might affect the observed bond market developments. First, from the point of view of investors, by compressing US benchmark yields, QE might have increased the demand for corporate bonds worldwide in search for higher returns. Second, QE created favourable conditions for issuing bonds by improving US and global financial conditions. Third, beyond the improvement in financial conditions, a "balance sheet" channel running via asset holdings and purchases by the Fed might have strengthened portfolio rebalancing

[1] See Fawley and Neely (2013) for a description of unconventional monetary policy measures of major central banks.

[2] See for example IMF (2010a, 2010b, 2011a, 2011b, 2011c, 2012, 2013a, 2013b) and Ostry et al. (2010 and 2011).

[3] The literature on QE is large and spans from theoretical studies assessing the implications of QE from a general equilibrium perspective to empirical studies measuring the impact of QE on financial markets. Concerning the latter group of empirical studies, which are closer to this study, they are predominantly event studies assessing the implications of QE for domestic (i.e. US) asset prices and attempting to identify the transmission channels of QE. Overall, the empirical literature shows that the LSAP lowered US Treasury yields (e.g. Gagnon et al., 2011; D'Amico and King, 2013; Wright, 2011), with similar evidence for the UK (Joyce et al., 2011), and MBS yields (Hancock and Passmore, 2011; Stroebel and Taylor, 2012). Krishnamurthy and Vissing-Jorgensen (2011) discuss the transmission channels of quantitative easing.

[4] On the macro front, Gambacorta et al. (2012) look at the spill-overs of QE on output and inflation across advanced economies.

[5] For the list of countries in the sample see Table 1.