

Box 2

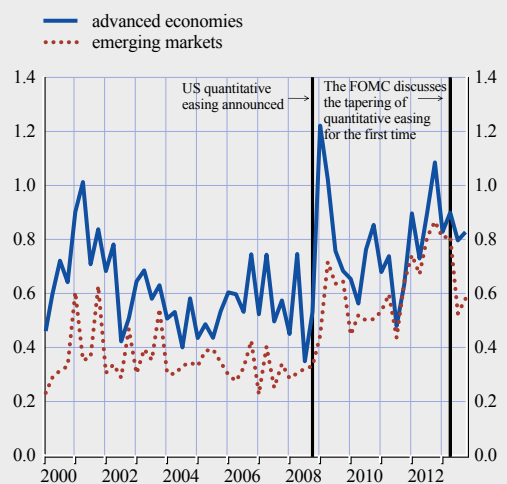
GLOBAL CORPORATE BOND ISSUANCE AND QUANTITATIVE EASING

Global non-financial corporate bond issuance has surged over the last four years. This increase has been particularly pronounced in emerging market economies (EMEs), where gross issuance has reached unprecedented levels, while issuance in advanced economies has also reached elevated levels by historical standards.

This rise in global corporate bond issuance has coincided largely with the inception of quantitative easing policies, notably the large-scale asset purchases of the US Federal Reserve System. In terms of *timing*, the rise in EME issuance appears to have corresponded largely with the introduction of quantitative easing in the United States in late 2008, while a noteworthy retrenchment accompanied signals of a potential withdrawal in mid-2013 (see Chart A). It terms of *extent*, issuance was also highly synchronised across countries, suggesting that common factors played an important role in driving global issuance activity. Since 2009, issuance has been above average, or in the highest quartile, in an

Chart A Global bond issuance by non-financial corporations

(Q1 2000 – Q4 2013; percentage of GDP)



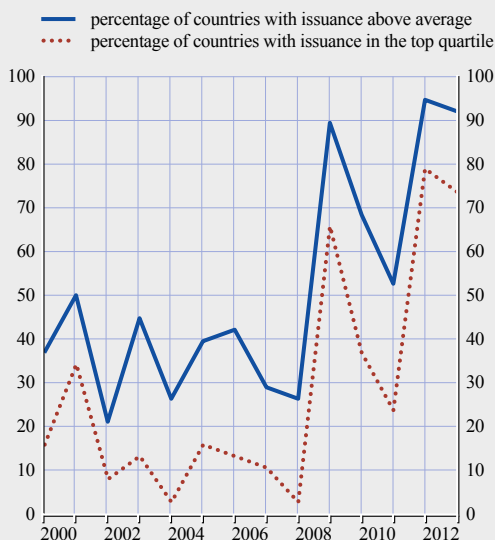
Source: Dealogic.

increasingly large number of countries, and was in the highest quartile almost everywhere in 2012 and 2013 (see Chart B).

US quantitative easing may have increased global bond market activity through at least two demand channels. First, its effectiveness in improving US and global financial conditions (by providing lower yields and reducing volatility) may have more than attenuated any cyclical downturn in bond issuance. Second, investor portfolio rebalancing across asset classes and countries may have resulted from the lowering of expected yields in the United States and/or reduced supply of certain US assets to the public. Clearly, supply factors may have also been at play. Bank deleveraging as part of the balance sheet adjustment process following the global financial crisis could have contributed to an unusually high degree of bank disintermediation in favour of market issuance by the corporate sector.

Chart B Synchronisation of non-financial corporations' bond issuance across countries

(2000 – 2013; percentage of total number of countries)



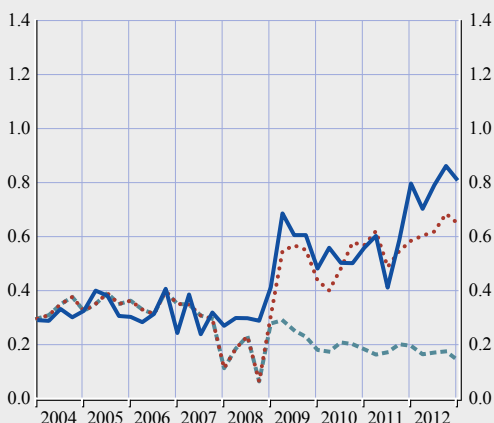
Source: Dealogic.
Note: Sample includes 18 emerging market and 19 advanced economies (excluding the United States).

Chart C Global bond issuance by non-financial corporations – actual and estimated impact of US quantitative easing

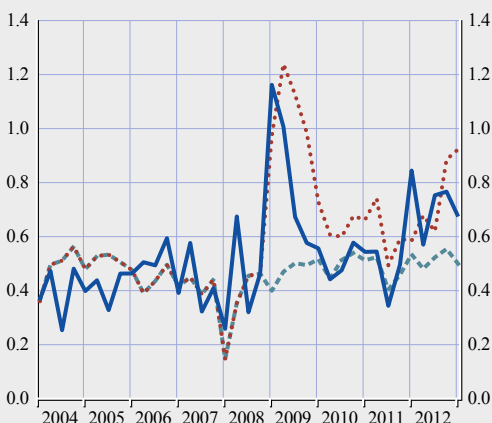
(Q1 2004 – Q1 2013; percentage of GDP)

— actual issuance
- - - prediction
- - - issuance without quantitative easing

a) Emerging markets



b) Advanced economies



Source: Lo Duca, M., Nicoletti, G. and Vidal Martinez, A., “Global corporate bond issuance: what role for US quantitative easing?”, *Working Paper Series*, No 1649, ECB, March 2014.
Note: Analysis excludes the United States.

One way of quantifying the impact of quantitative easing on global bond markets is to conduct a counterfactual analysis on the basis of a panel regression framework.¹ The results suggest that if securities held on the Federal Reserve System's balance sheet had been held steady at their level in the fourth quarter of 2008, EME issuance would have been approximately half of their actual issuance since 2009, with the gap increasing in late 2012. In advanced economies, bank deleveraging contributed to a greater need for alternative financing for non-financial corporations after 2009, while the impact of quantitative easing was smaller than in EMEs and concentrated in early 2009, mainly as a reflection of portfolio rebalancing related to the first wave of purchases of mortgage-backed securities by the Federal Reserve System after 2009.²

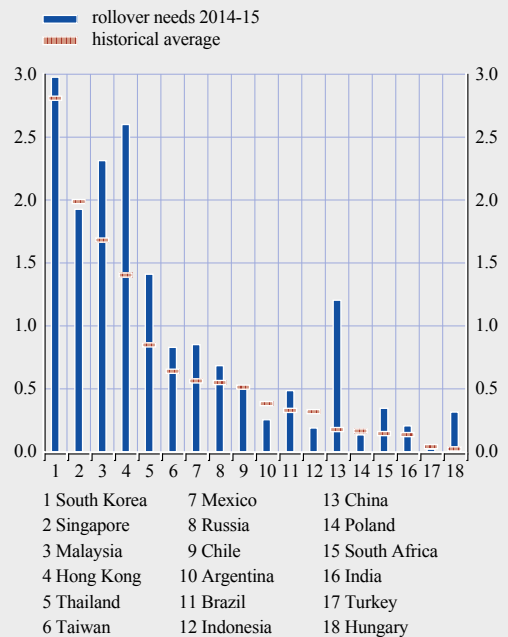
The results suggest that the Federal Reserve System's ongoing tapering of its quantitative easing programme might curtail EMEs' corporate bond issuance. Such an effect could be amplified by possible rollover risks.

Corporate bond rollover needs for 2014 and 2015 are high compared with the historical average in a number of countries (see Chart D). In this respect, EMEs with higher refinancing needs are most exposed to rollover risks, mainly China, Hong Kong SAR, Malaysia and Thailand, but to a lesser extent also Brazil, Hungary, South Korea, Mexico, South Africa and Russia, with the latter currently also exposed to heightened political risks.

All in all, just as the quantitative easing in the United States seems to have played an important role in driving issuance activity in global corporate bond markets over recent years, the tapering of the Federal Reserve System's quantitative easing programme might have the opposite impact. Amid significant rollover needs in a number of key EMEs, close monitoring of developments will be required as regards the prospective repercussions of this on global bond markets and, by extension, euro area financial stability.

Chart D Non-financial corporations' bond rollover needs in selected emerging economies in 2014 and 2015

(percentage of GDP; annual average)



Source: Dealogic.

Notes: Non-financial corporate bonds maturing by the end of 2015. The "historical average" refers to the period 2000-12.

1 A panel model investigates this issue by relating bond issuance by non-financial corporations to US quantitative easing in 19 advanced economies – excluding the United States – and 18 EMEs after controlling for a number of domestic and global factors that might affect bond issuance, including controls for investors' risk aversion (using the VIX), countries' growth prospects and bank deleveraging. For more details on the methodology, see Lo Duca, M., Nicoletti, G. and Vidal Martinez, A., "Global corporate bond issuance: what role for US quantitative easing?", *Working Paper Series*, No 1649, ECB, March 2014.

2 The presented charts correspond to a scenario in which it is assumed that the US ten-year yield and the VIX remain at their historical averages. In the cited paper, different assumptions are also examined with very similar results: bond issuance in EMEs has been substantially more influenced by the US large-scale asset purchase programmes than bond issuance in advanced economies.