

Box I

FINANCIAL STABILITY CHALLENGES POSED BY VERY LOW RATES OF CONSUMER PRICE INFLATION

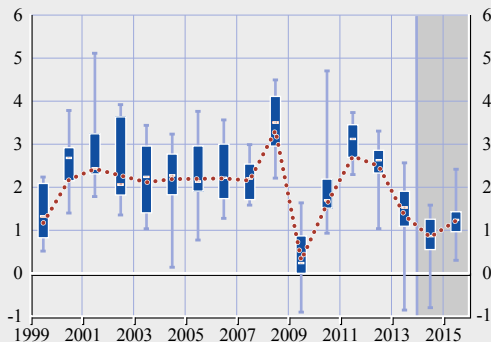
Over recent months, HICP inflation in the euro area has fallen to low levels. The ECB’s Governing Council expects inflation to remain low for a prolonged period, followed by a gradual upward movement in HICP inflation rates. However, some analysts have voiced concerns about the potential for deflation. Associated financial stability concerns relate primarily to debt sustainability challenges posed by low (or even negative) inflation outcomes at the national level (see Chart A).

Low rates of inflation in the euro area are the result of a confluence of many factors. *Cost-push* factors, both global and local in nature, have contributed to the decline. Global factors have in many ways been dominant, stemming from broader developments outside the euro area. They have affected the euro area and other advanced economies alike, including a deceleration in energy and food prices (see Chart B). For the euro area, this has been amplified by an appreciating euro effective exchange rate. Local factors have also contributed, including the impact of labour and product market reforms. More country-specific *demand-pull* factors have led to differentiated inflation outcomes, as countries have been recovering at a different pace from recessions of varying magnitudes. Euro area medium to long-term *inflation expectations* have remained firmly anchored in the midst of these probably transitory cost-push and demand-pull forces.

The impact these low inflation outcomes will have on financial stability depends on how they affect debt dynamics – notably how the amplitude and persistence of disinflationary pressures interact with prevailing levels of debt (see Chart C). On the one hand, differentials in inflation

Chart A HICP inflation in the euro area and differentials across countries

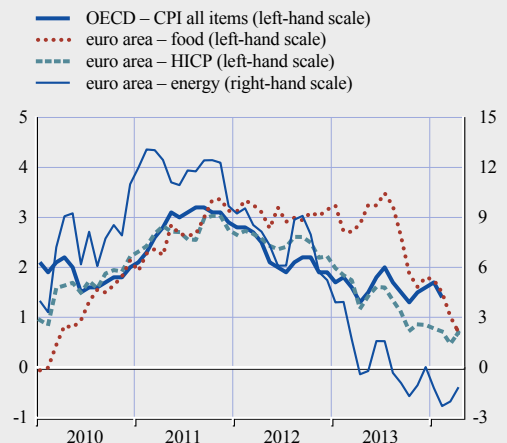
(1999 – 2015; percentage per annum)



Sources: ECB, Eurostat and European Commission.
Notes: The chart shows the minimum, maximum, median and interquartile range across the 18 euro area countries. The shaded area shows projections from the European Commission’s spring 2014 economic forecast.

Chart B Price developments in OECD countries and in the euro area

(Jan. 2010 – Apr. 2014; percentage per annum)



Sources: OECD and Eurostat.

rates across euro area countries can be seen as welcome relative price adjustments which are part of a structural process of rebalancing, contributing to the restoration of price competitiveness in economies where it had been eroded in the pre-crisis period. On the other hand, low inflation rates complicate balance sheet repair and may thereby also jeopardise financial stability through adverse effects on debt dynamics. As the vast majority of debt contracts are written in nominal terms, lower inflation contributes to a slower than expected decline in the real debt burden for households, firms and the government. At the limit, generalised falls in the price level would de facto increase the real value of debt contracts and the real debt service burden through the potential for higher real interest rates.

In general, a debt deflation spiral can be amplified by three potentially mutually reinforcing channels:¹

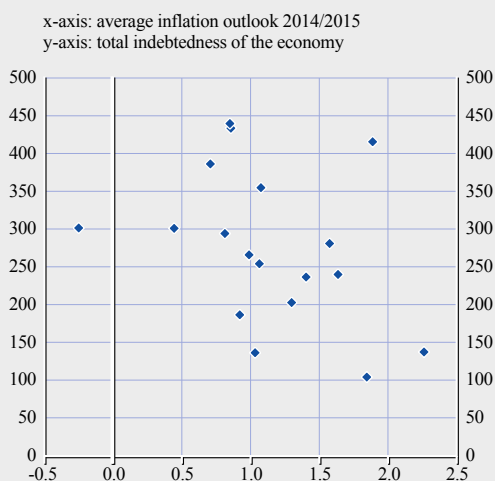
1. *Price level deflation* increases the real debt level and induces households and firms to redeem their debt to at least counter the real debt increase. These effects are greater, the longer the average maturity of the debt stock and the interest rate fixation period. The associated decline in consumption leads to a further fall in the general price level.
2. Downward pressure on *asset prices* may ensue if debtors need to sell some of their assets to service their debt. Broad-based distress selling of assets in turn leads to further asset price declines, causing a reduction in net worth with a detrimental impact on aggregate demand and a falling general price level.
3. The banking system may be affected directly to the extent that higher real debt burdens cause widespread default, which in turn leads to impaired *credit intermediation*. The resulting credit contraction would exert additional downward pressure on asset prices.

An initial level of debt that is sustainable as well as inflation expectations that are well anchored close to the central bank's inflation objective are crucial for financial and, ultimately, economic stability. Where debt levels are sustainable, negative or very low inflation rates would complicate the deleveraging process because less of the real debt burden would be diminished by inflation, leaving less capacity to expand aggregate demand and thus resulting in a slower economic recovery. Only in an extreme situation, where initial debt levels are unsustainably high and inflation expectations are not anchored, would a destabilising debt deflation spiral involving the above channels evolve, placing increasing pressure on consumer and asset prices.

¹ For a taxonomy of these three channels, summarising the literature on debt deflation, see von Peter, G., "Debt deflation: concepts and a stylised model", *Working Papers*, No 176, Bank for International Settlements (BIS), April 2005.

Chart C Total indebtedness of the economy and inflation outlook across the euro area

(Q3 2013; percentage of GDP; percentage per annum)



Sources: European Commission spring 2014 economic forecast, ECB and ECB calculations.
Note: Total indebtedness of the economy comprises the debt level of households, non-financial corporations and the general government.

The potential for debt deflation to materialise in the euro area is very remote as it would require an economy-wide and protracted decline in prices and inflation expectations. Despite low readings of headline inflation across the euro area and modest wage declines in the presence of continued high debt levels in some euro area countries, medium-term inflation expectations remain firmly anchored and HICP inflation rates are expected to move gradually upwards. Moreover, ECB monetary policy remains firmly geared towards price stability in the euro area. Ultimately, debt sustainability depends not only on inflation, but on a broader set of factors such as the level of indebtedness and economic growth. This clearly underscores the role that structural reforms and continued balance sheet repair have to play in supporting the resilience of the financial sector.

Similarly to economic developments in the euro area, the **global economy** has been gradually gaining traction, albeit against the backdrop of an ongoing underlying shift in regional growth dynamics. Economic recovery in advanced economies continues to strengthen amid continued strong monetary policy support. By contrast, economic dynamics in emerging economies have lost further steam, owing to credit overhangs, structural problems and tighter financial conditions, in particular in countries exhibiting more pronounced external and domestic imbalances. This development appears to have been reinforced by changes in financial market sentiment towards emerging economies as a corollary of the US Federal Reserve System's ongoing tapering of its quantitative easing programme (see Box 2).

Box 2

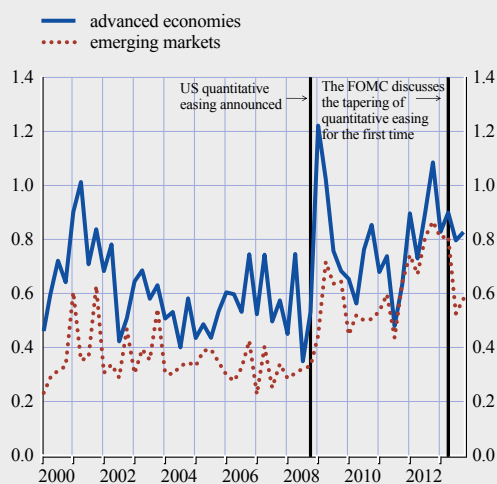
GLOBAL CORPORATE BOND ISSUANCE AND QUANTITATIVE EASING

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)



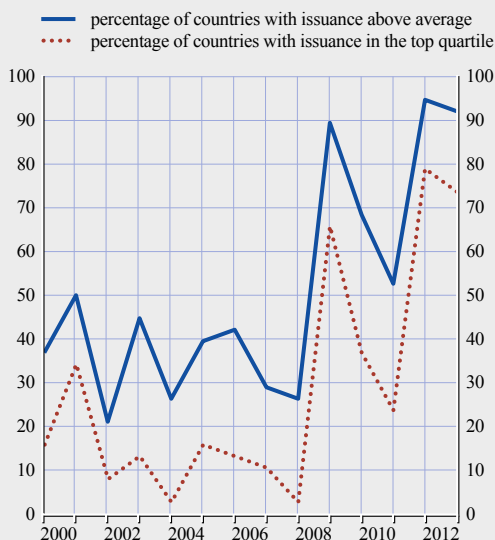
Source: Dealogic.

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)



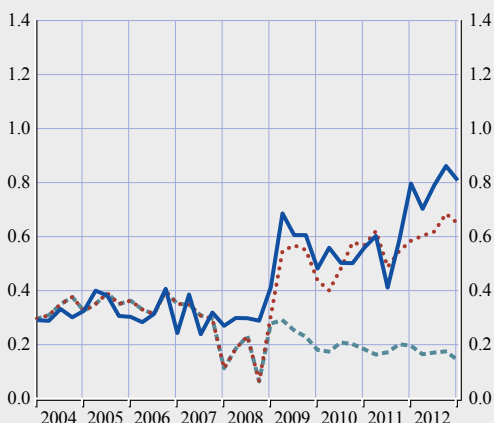
Source: Dealogic.
Note: Sample includes 18 emerging market and 19 advanced economies (excluding the United States).

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

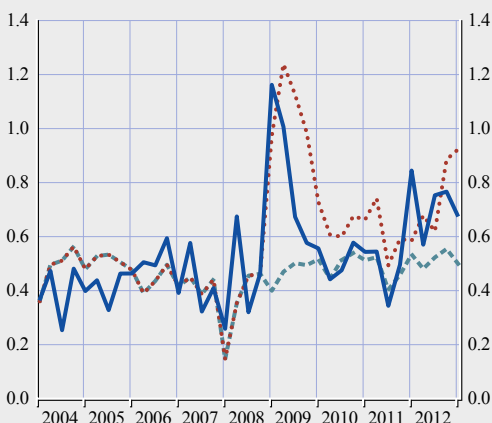
(Q1 2004 – Q1 2013; percentage of GDP)

— 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.