

Box 3

RECENT INCREASES IN REAL YIELDS AND THEIR IMPLICATIONS FOR THE ANALYSIS OF INFLATION EXPECTATIONS

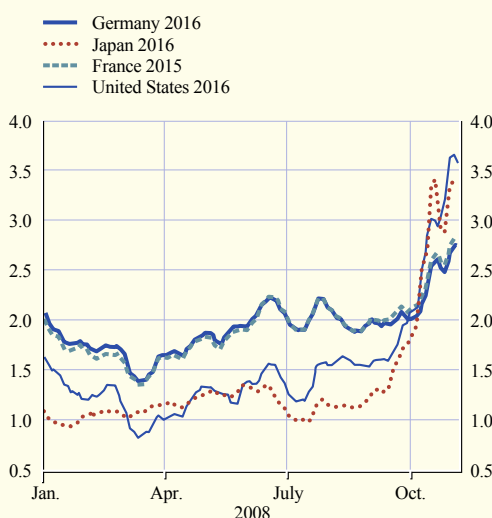
Between mid-September and end-October real yields on inflation-linked bonds in major markets increased sharply (see Chart A). The yield increases were most pronounced for US and Japanese inflation-linked bonds, although the yields on bonds linked to the euro area HICP (excluding tobacco) also increased significantly. Under normal market conditions, developments in real yields reflect, among other things, revisions in investors' longer-term outlook for the real economy. However, such an interpretation of the recent movements would lead to the implausible conclusion that investors have become more sanguine about the economic outlook. This assessment would clearly be at odds with most other timely indicators of the global economic outlook. This box provides an alternative interpretation, linking the recent increases in global real yields to the current turbulent market conditions, which are characterised by investors' efforts to reduce risk and leverage and a strong preference for the most liquid assets. It also highlights the implications of such "distortions" in index-linked bond yields for break-even inflation rates, the bond market-based measures of inflation expectations and related inflation risk premia.

The recent increases in real yields appear to be related to the ongoing process of deleveraging among shorter-term investors in the context of the intensification of the financial crisis. According to market sources, several investors with leveraged positions in inflation-linked securities have recently been forced to liquidate their positions in the face of margin calls and increased funding costs. Amid general market expectations of sharply declining inflation over the coming year, demand from longer-term investors, such as pension funds, has not been sufficient to absorb the selling pressure without sizeable declines in inflation-linked bond prices.

Another potential source of the decline in inflation-linked bond prices is the comparatively lower market liquidity of these instruments. Even under normal market conditions,

Chart A Real yields on inflation-linked bonds

(percentages per annum; five-day moving averages of daily data)



Sources: Bloomberg, ECB calculations.
Notes: The yields on the US and Japanese bonds have been annualised. 2015 and 2016 refer to the year in which the bonds mature.

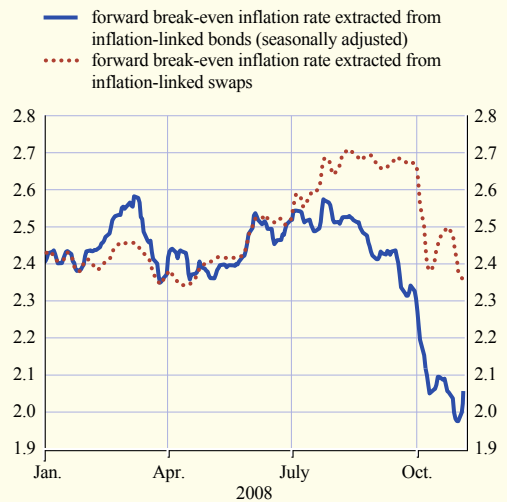
inflation-linked bonds are somewhat less liquid than their nominal counterparts, but this liquidity disadvantage tends to be aggravated during periods of financial market stress. This makes inflation-linked bonds considerably less attractive for investors seeking short-term shelter from the volatility of riskier assets. The fact that investors currently have an exceptionally strong appetite for the most liquid assets is evidenced by the very steep increase in the differential between the yield on recently issued ten-year US Treasury notes and an “off-the-run” yield curve estimated from less liquid, seasoned Treasury notes and bonds. This yield differential is a common gauge of liquidity premia.

Technical market factors aside, market expectations of an increase in government funding needs in the wake of the announced financial sector rescue packages could in principle also have led to some upward pressure on longer-term interest rates in the major markets (see Box 2). However, real yields increased more abruptly than corresponding nominal yields, and this sharp increase occurred at the same time as the surge in liquidity premia. These circumstances suggest that the effects of an expected increase in the future supply of government bonds played only a secondary role in the recent spike in global inflation-linked bond yields. It is noteworthy, however, that both nominal and real government bond yields have withstood the downward pressure stemming from safe haven flows into the safest and most liquid government bonds.

Break-even inflation rates are obtained by subtracting the real yield on an inflation-linked bond from the yield on a conventional nominal bond of comparable maturity. Therefore, an important consequence of the seemingly distorted levels of real yields is that spot break-even inflation rates are probably now lower than the true compensation investors require in return for exposure to their anticipated rate of inflation and the associated risk of a loss in general purchasing power entailed by holding a nominal bond. As a result, not all of the recent decline in bond market-based break-even inflation rates should be attributed to declines in inflation expectations (and inflation risk premia), although the evidence from inflation-linked swaps (see Chart B) does suggest some genuine declines in long-term inflation expectations as well.

Chart B Five-year forward euro area break-even inflation rates five years ahead extracted from inflation-linked bonds and swaps

(percentages per annum; five-day moving averages of daily data)



Sources: Reuters and ECB calculations.
Note: The data used are zero coupon rates.