

## THE EFFECT OF RECENT ECB MONETARY POLICY MEASURES ON LONG-TERM INFLATION EXPECTATIONS

Inflation expectations play a key role in the price and wage setting process. Inflation-linked financial assets, which include a price for the protection they provide against future inflation, and which are available daily, are a valuable source of information for estimating agents' future inflation expectations. Inflation swaps are financial contracts in which one party undertakes to pay a multiple of inflation up to a certain date, in exchange for a set amount paid by the other party. This set amount can be understood as compensation for protection against future inflation, and as such contains important information on investor expectations. However, the information content of the price of these assets is clouded by the fact that, like any other form of insurance, it includes a premium for transfer of the risk and a liquidity premium. One alternative for measuring inflation expectations are the various surveys drawing on private analysts' expectations. The advantage of these surveys is that they avoid the problem of the risk and liquidity premia. The drawback is that they are less frequent, generally quarterly, which limits their usefulness for analysing monetary policy.

A recent Banco de España article<sup>1</sup> proposed a measure for long-term euro area inflation expectations combining both sources of information, i.e. surveys and financial market data. The surveys used are the Consensus Forecast surveys, the ECB's Survey of Professional Forecasters and the inflation flash estimate. Chart 1.1 depicts long-term euro area inflation expectations (five-year forward inflation five years ahead, or in other words, in between six and ten years' time), from which the estimated risk premium has been excluded. The chart shows that inflation expectations have remained clearly below 2% since 2005 (the first date from which the data availability permits this analysis) to date.

Over the course of the period studied, there were two notable dips in these inflation expectation indicators. The first, in 2008-09, during the global financial crisis following the collapse of Lehman Brothers, was very marked. The second, between 2013 and early 2015, was much more gradual and gave rise to growing concern regarding a possible deanchoring of expectations in the euro area. In both cases the ECB introduced non-standard monetary

policy measures to reverse the downward inflation trajectory. These measures generally proved effective, reversing the change observed. In particular, the launch of the ECB's asset purchase programme (the public sector purchase programme or PSPP) in early 2015 marked a turnaround in the long-term expectations, which have risen gradually since then, fortified by the subsequent extensions to the programme. Accordingly, in mid-2018, long-term inflation expectations were similar to those observed between 2005 and 2007 (and in 2011-12).

However, during 2018 Q4 long-term inflation expectations declined, against a backdrop of marked deterioration of euro area economic growth forecasts. This downturn in inflation expectations is still too incipient for firm conclusions to be drawn on its degree of persistence. In any event, the change observed demands that closer attention be paid to the possible signs emanating from these indicators, in order to correctly calibrate the future monetary policy stance.

Chart 1.2 presents a similar analysis for the United States. Here, long-term inflation expectations are much higher than in the euro area: around 2.5% before the crisis and around 2.3% since the start of monetary normalisation. This difference is consistent with the US economy's more advanced cyclical position, although there may also be other contributory factors. The chart shows that in the United States also, the various non-standard monetary policy measures introduced had varying impacts on inflation expectations. The slump in inflation expectations following the global financial crisis was successfully offset by the quantitative easing (QE) programmes.<sup>2</sup> Moreover, as is now happening in the euro area, when the net asset purchases came to an end inflation expectations also declined, although they ultimately reversed, so that expected inflation has steadied at just over 2.3%.

To conclude, following the crisis the monetary policies of the main economies have had to offset certain downward moves in inflation expectations, using measures not until then included among central banks' tools, in order to steady this key component of the price and wage setting process.

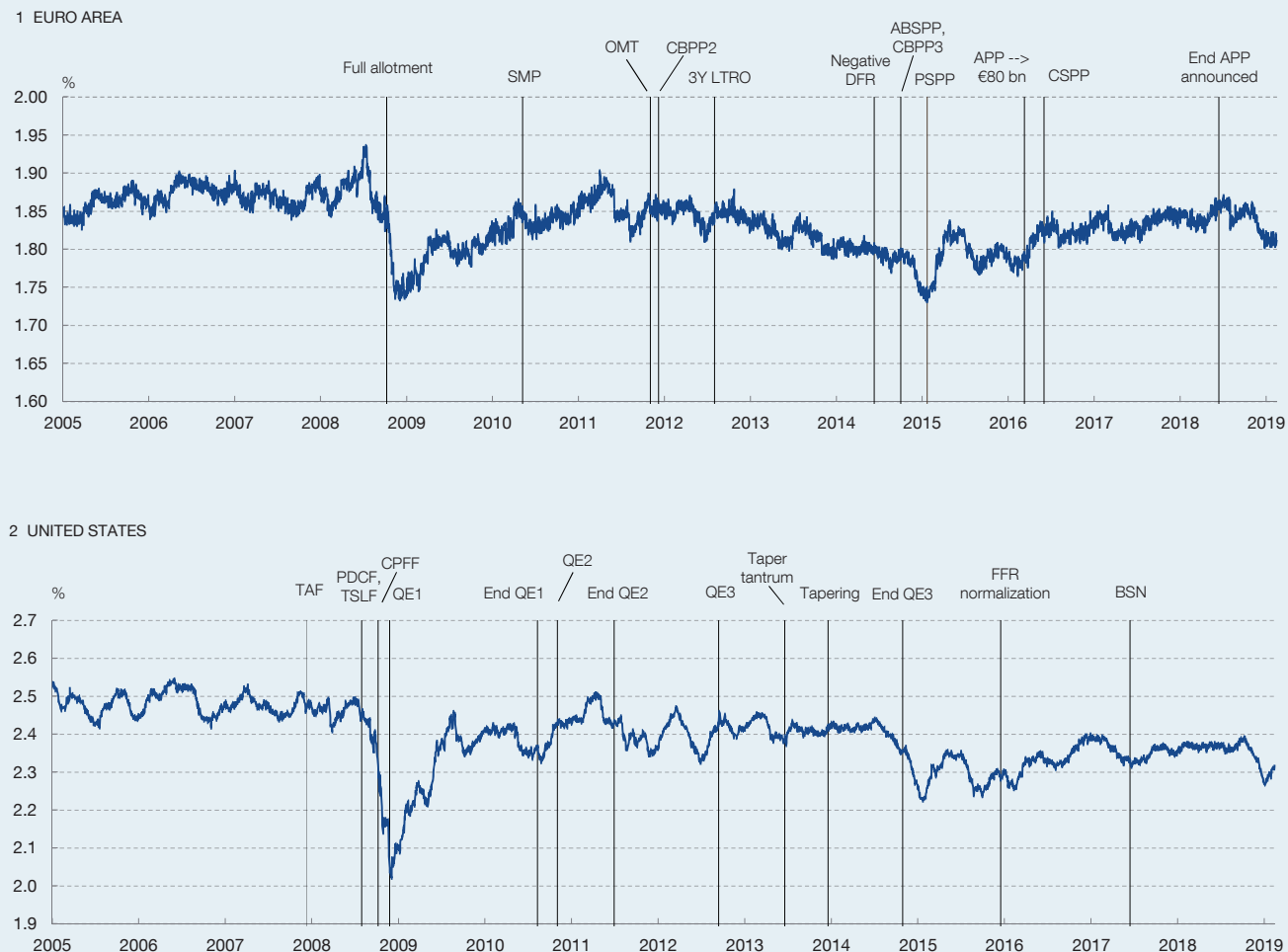
1 See R. Gimeno and E. Ortega (2018), "Euro area inflation expectations", *Economic Bulletin*, 1/2018, Banco de España.

2 See R. Reis (2016), *Funding Quantitative Easing to Target Inflation*, CEPR Discussion Paper No. DP11505.

**THE EFFECT OF RECENT ECB MONETARY POLICY MEASURES ON LONG-TERM INFLATION EXPECTATIONS (cont'd)**

Chart 1  
MARKET INFLATION EXPECTATIONS IN THE EURO AREA AND THE UNITED STATES

The Eurosystem’s non-standard monetary policy measures proved effective in reversing the downward path of long-term inflation expectations in the euro area, both when they fell sharply during the global financial crisis in 2008-09 and when they declined more gradually between 2013 and early 2015, when concerns arose regarding a possible deanchoring of expectations in the euro area. In the United States, non-standard monetary policy measures also shaped long-term inflation expectations, to a varying extent.



SOURCE: Banco de España, based on swap rates at different terms supplied by Datastream.