››› Crude oil price no longer drives inflation expectations

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The price of crude oil collapsed from mid-2014 until early this year. A barrel of Brent crude cost 75 % less at one point in January 2016 than in late June 2014. That trend coincided with noticeably falling inflation expectations on the part of financial market participants and prompted the European Central Bank to make monetary policy even more expansionary and launch a comprehensive bond purchase programme.

As the oil price has been exhibiting an upward trend again since February, the question is whether market-based medium-term inflation expectations will trend upward again as well. Evidence so far indicates that this will not happen. So the current oil price trend itself does not provide the ECB with a motive for adjusting monetary policy in the near future.

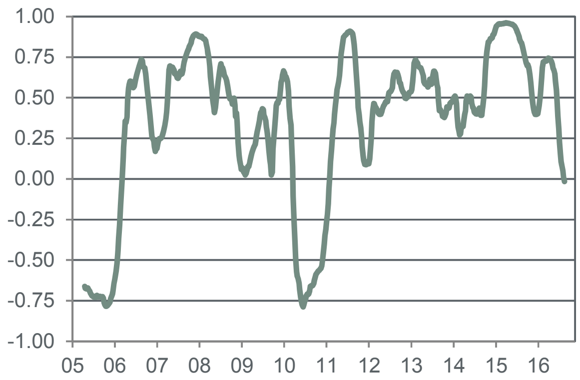
Market-based inflation expectations as a key reference variable for monetary policy

Market-based inflation expectations are a key factor that guides central banks' monetary policy. The ECB, amongst others, has repeatedly pointed out the great importance of these parameters. Particular attention is paid to what are known as 5-year, 5-year forward inflation expectations (in the following: 5y5y inflation expectations). They refer to the expectations of a rising consumer price level over a five-year period that begins in five years. Current 5y5y inflation expectations inform about the annual inflation rate market participants expect on average for the period from September 2021 to September 2026, for example. Thus they represent average inflation expectations for the medium term which monetary policy aims to regulate. 5y5y inflation expectations are derived from inflation swaps of different maturities. Inflation swaps are derivative securities with which financial market actors can trade inflation and hedge against inflation risk.

2014 to early 2016: oil price collapses, market-based inflation expectations follow

The development of the oil price is an important determinant of inflation and therefore also influences inflation expectations. When the prices of crude oil fell dramatically from mid-2014 to early 2016, the 5y5y inflation expectations dropped noticeably at the same time. They even fell significantly below 2 %, marking new lows since the introduction of inflation swaps in 2004. That was a major reason for the ECB to make its monetary policy more expansionary yet again. In late summer 2014 it launched its current bond purchase programme, which it has subsequently expanded on several occasions (among other things by including government bond purchases from March 2015 on). Its aim is to prevent inflation expectations from deanchoring from the vicinity of its inflation target of just under 2 %. From mid-2014 to spring 2015 the correlation between oil price and 5y5y inflation expectations increased steadily. In April 2015 the rolling 52-week correlation between the two variables had reached 95 %, a historically high level (Figure 1). Even in the following period, specifically up to February 2016, both the oil price and 5y5y inflation expectations dropped (Figure 2).

Figure 1: Rolling 52-week correlation of crude oil price (Brent, EUR / bl) and 5y5y inflation expectations



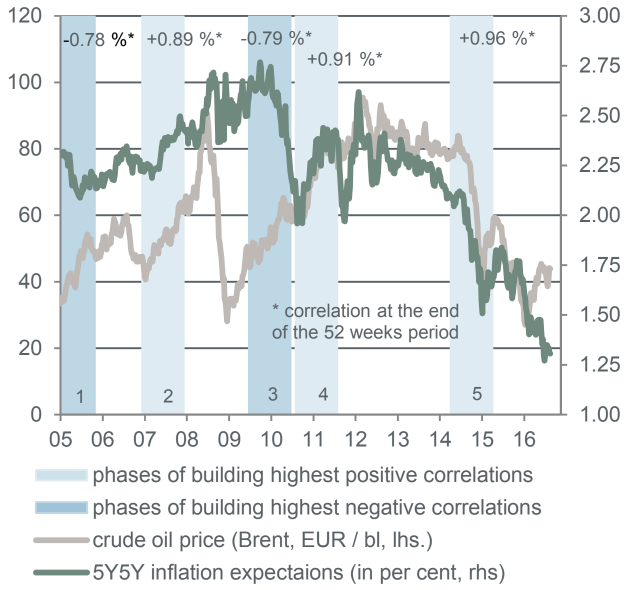
X-axis: years, Y-axis: correlation coefficient in per cent

Sources: Bloomberg, own calculations

Will the recovery of the oil market now also lead to rising inflation expectations?

That raises the question whether a rising oil price can also drive medium-term inflation expectations up again – with corresponding implications for monetary policy. A glance at the past, that is, the period since inflation swaps were introduced in 2004, provides no conclusive answer. This is because the correlation between the oil price and 5y5y inflation expectations generally fluctuates on a large scale (Figures 1 and 2). When the price of crude was rising, so far there have been times when the correlation was very strong in positive territory – for example in 2007/2008, when the oil price rose sharply and market actors often invoked the "peak oil" theory, the assumption that oil production had exceeded its peak. Then again, phases have been observed in which the correlation was negative – for instance in 2009/2010, when growth pessimism tended to prevail for the euro area at the start of the "euro crisis". The developments of the past twelve years fail to dictate a compelling logic that a rising oil price drives 5y5y inflation expectations. What appears to be important for the closeness of the correlation is what longer-term "story" market participants associate with oil price movements. Apparently, the latter often influence 5y5y inflation expectations only indirectly while others are the actual drivers. Monetary policy is thus tasked with identifying these drivers and addressing them where necessary, but not the oil price itself.

Figure 2: Crude oil price and 5y5y inflation expectations



Sources: Bloomberg, own calculations

No rise in inflation expectations so far

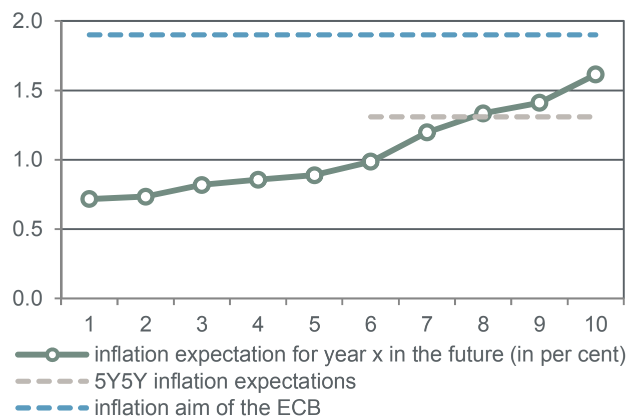
The correlation between the two variables discussed here has started to weaken since February. Whereas the oil price since then has again trended upward, 5y5y inflation expectations had initially fallen again, stabilising at a historically low level only in the past weeks. The fact that higher oil prices are not driving inflation expectations at the moment is probably due in part to the situation on the oil market, which has changed since 2007, for example. A lasting positive supply shock occurred there in the past years. Particularly the increased use of fracking technology in the USA has created a new state of affairs on the crude oil market. It has dampened price fantasies for the commodity for years to come, especially since fracking wells are relatively quickly put (back) into operation when the oil price crosses a certain threshold (around USD 45 / bl for the type WTI), thereby putting a cap on the price of crude – even in the short term. Accordingly, market participants probably perceive oil price increases such as the current ones to be merely temporary; they do not expect them to contribute to inflation in the longer term, as was the case in the phase 2007/2008, for instance. Even a further oil price increase in the coming months should therefore have only a very limited impact on inflation expectations.

Besides, market participants have probably changed their view of many emerging market economies in light of the oil price weakness of the last two years. As a result of lower prices, oil-exporting emerging market economies now have fewer funds at their disposal for purchases on global goods markets than before mid-2014, when prices were higher. Market actors probably tend to see that as another factor that keeps inflation in check.

Little help for the ECB

The ECB therefore cannot expect the degree of 5y5y inflation expectations to approach earlier values of around 2 % in the near future because of the oil price trend. Such levels will not appear realistic again until significant consumer price increases are expected on a broader basis. The ECB could increase the degree of expansion of its monetary policy again to achieve that. More effective, however, would be brightening growth prospects for the euro area and, as a result, a growing willingness of economic agents to spend their money. The only thing monetary policy can do, however, is create enabling conditions by providing an adequate money supply and a functioning credit channel. Improving growth on a sustained basis is the job of economic policy – in the form of structural reforms and intelligent fiscal policies, which can cut the Gordian knot of capital expenditure restraint in particular – especially in times of heightened uncertainty.

Figure 3: Current inflation expectations derived from inflation swaps for each of the next ten years



Sources: Bloomberg, own calculations

5y5y inflation expectations are not the measure of all things

If we take a closer look at the market-based inflation expectations for the euro area, it is striking that at the end of the five-year period of the 5y5y expectations they are relatively close to the ECB's inflation target, at around 1.6 % (Figure 3). So long as that is the case and other measures of inflation such as the long-term inflation expectations of professional forecasters – which are important for the ECB as well – are aligned with the central bank's inflation target at the same time, it is very likely that the ECB will not add any further measures to its already very expansionary policy. ■