FOCUS · Monetary policy frameworks for the future

In September, the Fed put an end to nine years of unconventional monetary policy by announcing it was going to unwind its balance sheet. The Fed intends to return to the conventional monetary policy framework of the period before 2008. However, the emergence of different views regarding how the economy works and the use of unconventional tools have called into question the future framework of operation for central banks. We will examine this below.

Before the financial crisis erupted in 2008, monetary policy was essentially implemented via a short-run reference interest rate adjusted by central banks to ensure price stability and, directly or indirectly, appropriate capacity utilisation. Moreover, macroeconomic policy did not cover financial regulation. However, this framework -result of the macroeconomic consensus reached between the 1980s and 1990s- has been drastically altered over the past few years. On the one hand, financial regulation now comes under the set of macroeconomic policy tools, given the close connection between financial and macroeconomic stability.

On the other hand, there is a narrative that argues that the interest rate that balances the supply of savings and demand for investment will remain relatively low due to the persistence of structural factors related to demographics, technological change and risk aversion.¹ This narrative has become influential in central banking circles, as shown by the long-term macroeconomic scenario of the committee that decides the Fed's monetary policy (the Federal Open Market Committee or FOMC). As can be seen in the first two charts, the FOMC has revised downwards both the growth potential of the US economy and also the interest rate that they deem appropriate in the long run (the long-run equilibrium interest rate). Moreover, since the benchmark interest rate cannot fall much below 0%,² something which, according to this narrative, would be required more frequently than in the past, central banks would lose their room to manoeuvre if they went on using traditional instruments. To avoid this situation, two broad types of action have been proposed. One is to keep interest rates as a core tool and redefine the central bank target. The alternative is to maintain the target (typically, medium-term inflation in the region of 2%) and incorporate new monetary policy tools.

FOMC forecasts: potential GDP growth

Central trend of FOMC members (%)



Source: CaixaBank Research, based on projections by the Federal Open Market Committee

FOMC forecasts: equilibrium reference rate

Median of FOMC members (%)



Source: CaixaBank Research, based on projections by the Federal Open Market Committee

Should the benchmark interest rate be kept as the main tool, the central bank can gain leeway by setting a target that allows a higher inflation rate so that the equilibrium nominal interest rate does not fall as much as the equilibrium real rate. There are three main options in this case: setting a higher inflation target, setting the target in price-level terms or setting the target in terms of nominal GDP. Raising the inflation target minimises any changes in the underlying framework although it permanently imposes the cost of higher inflation. On the other hand, with a price-level target the central bank would not ignore events resulting in temporary deviations in inflation (such as energy price fluctuations). In fact, in response it would allow inflation to temporarily deviate in the opposite direction to offset this.

^{1.} See the Focus «What is the new equilibrium interest rate?» in MR09/2017

^{2.} This lower limit exists because there is an alternative course of action, namely withdrawing deposits and keeping resources in cash, with an interest rate equal to 0% (or slightly negative, taking storage costs into account).

For instance, if a drop in aggregate demand pushed inflation down to 1%, the central bank would tolerate a period of inflation above 2% in order to return to its price level target. In this case, investors would automatically anticipate the intention to keep interest rates low for longer, thereby also relaxing long-term interest rates. The option of setting a target in terms of nominal GDP uses a similar mechanism. However, both alternatives could result in unpopular policies. For example, an exogenous rise in energy prices, as in the 1970s, would force a central bank to tighten monetary policy even during an economic recession.

Given that any changes in the target could entail a considerable cost in credibility terms, one alternative framework is to keep the present targets and use unconventional measures (negative interest rates, forward guidance and balance sheet policies such as QE) in addition to the more typical tools of central banks. One advantage of this option is that such measures can be more accurately gauged to the particular needs of the time. On the one hand, negative interest rates support traditional transmission mechanisms, albeit with decreasing returns due to the erosion of financial sector margins. They may even lose their effectiveness entirely at very negative levels.3 At this point, forward guidance and asset purchases are a way of continuing to push down longer term interest rates, as employed by the main central banks over the past few years. The Bank of Japan has gone even further and explicitly targeted long-term interest rates. Although this measure is more precise than QE, it is difficult to use systematically because its effectiveness depends on a central bank's credibility with the markets. If they are convinced, the market rate will be the same as the rate announced by the central bank, even if the latter makes no purchases that directly influence bond prices. But if the markets are not convinced, the central bank would have to buy up most of the assets to bring the interest rate to its target, to such an extent that its balance sheet might go out of control. And the problem could be even worse. To convince the market, the long-run interest rate announced would have to be in line with the expected trend in the short-run interest rate, which constantly changes depending on the trend in economic activity indicators.

Before choosing one of these alternatives over another, it should be noted that they are based on a relatively uncertain view of the world. This can be seen in the imprecise estimates of the equilibrium real interest rate. As shown by the third chart, although there is a clear downward trend in the equilibrium real interest rate,

Real natural rate of interest: estimate and uncertainty



Source: CaixaBank Research, based on data from Holston, Laubach and Williams (2016).

we are still unable to determine its level with a reasonable degree of confidence. Such imprecision is actually a sign of the uncertainty surrounding the traditional relationships between interest rates, economic activity and inflation, which are used to estimate the equilibrium interest rate. For example, the predominant narrative for central banks assumes a strong relationship between economic activity and inflation on the domestic front. A central bank can control inflation via the impact of financial conditions on economic activity. However, there are signs that the relationship between a country's inflation and its economic activity is weakening. Among other factors, this is due to the globalisation of goods and services markets, the offshoring of production and global value chains. If this is the case, central banks will have lost their ability to influence inflation,⁵ at least individually (and must therefore aim for more coordinated action between central banks). In this respect, there is an underlying and much wider discussion concerning what we actually mean by price stability. This currently focuses on the consumer price of goods and services. However, monetary policy strongly influences the price of financial assets and has a consequent impact on financial instability. It can therefore be argued that central banks should pay more attention to such areas.

In short, there are different options available for monetary policy to offset lower equilibrium interest rates. But just how suitable they are is far from certain. One long-term solution entailing relatively few distortions consists of directly addressing the factors responsible for the decline in equilibrium interest rates. This involves stimulating long-term growth and thereby demand for investment via measures that promote education, research and infrastructures.

5. See Borio, C. (2017), «Through the looking glass», BIS, OMFIF City Lecture.

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^{3.} One drastic solution to get rid of this ceiling would be to eliminate cash. 4. See Beyer, R. and Wieland, V. (2017), «Instability, imprecision, and inconsistent use of equilibrium real interest rate estimates», IMFS, Working Paper.