

Many observers believe that monetary policy becomes ineffective when the policy target rate approaches zero. In fact, central banks have several powerful tools at their disposal even when the target rate hits zero.

However, the impact of these tools on the economy and inflation is difficult to predict. The lack of experience with unconventional policy tools means that there is little data that economists could use to forecast their effects. In some cases, economists also do not understand the precise mechanism by which the policy tool influences the economy and the inflation outlook.

Altering unconventional policies quickly also can be more difficult than simply changing an interest rate target. In light of these uncertainties and obstacles, central banks reserve unconventional policy tools only for extreme circumstances. The combination of a global financial crisis and the deepest recession since World War II has triggered unprecedented use of unconventional policy tools by a number of central banks.

One unconventional approach is for the central bank to make a commitment today about *future* policy target rates. For example, if policymakers believe that inflation will stay below their target, they can promise to keep their policy target rate low for an extended period. If such a *policy duration commitment* is fixed in duration – say, for several quarters – we call it an *unconditional* commitment, because it depends only on the passage of time, rather than on developments that occur during the period. Alternatively, a central bank can make a *conditional* commitment to keep interest rates low until economic conditions change (say, an upturn in business activity and a rise of employment).

How has the Federal Reserve used policy duration commitments? In 2002-03, the Federal Open Market Committee (FOMC) believed that inflation would sink undesirably low and policymakers worried about the possibility of deflation. In an unconditional commitment, the FOMC indicated that its target funds rate would stay low for the “foreseeable future” or for a “considerable period.” Even when policy began to tighten in 2004, the authorities assured markets that the withdrawal of accommodation would occur at a “measured pace” to avoid fears of sharp rate hikes.

The FOMC shifted to a conditional approach in 2008 when the financial crisis deepened and deflation worries resurfaced. Policymakers announced that “weak economic conditions are likely to warrant exceptionally low levels of the federal funds rate for some time.”¹ The statement shows that economic conditions, rather than the passage of time, would determine how long policy rates stay low.

¹ Statement of the Federal Open Market Committee, December 16, 2008. See <http://www.federalreserve.gov/newsevents/press/monetary/20081216b.htm>.

How do duration commitments affect the economy and inflation? A policy commitment can influence long-term interest rates that affect private spending. As Chapter 7 highlights, long-term bond yields depend in part on expectations about future short-term rates, which the central bank has the power to alter. Consequently, what central bankers say about their future plans matters greatly. Indeed, various tests indicate that the FOMC's words in 2002-03 were at least as powerful as its policy rate deeds in lowering long-term interest rates.

To be effective, a policy duration commitment needs to be credible. Otherwise, long-term market interest rates may not respond as a central bank hopes when it alters the policy rate target. In the past, policymakers have used a variety of mechanisms to make their commitments about future policy more credible. For example, from the late 1930s until 1951, the Fed intervened directly in markets to cap the interest rates on Treasury bonds.

Today, many economists advocate policy frameworks that can enhance the credibility of a duration commitment when it is most likely to be needed. One example is an *inflation-targeting framework*. If a central bank targets inflation, a commitment to keep interest rates low will be most credible precisely when inflation is expected to stay below target for some time. By contrast, a commitment to keep policy rates low *beyond* the date when inflation is expected to rise sustainably above the target would be less credible.

If a particular commitment is seen as inconsistent with what the central bank would choose to do when future circumstances arise, the authorities may not be able to make that commitment credible. This problem of *time consistency* can sometimes be overcome by altering the policy framework. For example, the introduction of inflation targeting can help counter deflation by making a central bank's policy duration commitment more credible.

One concern that central bankers have about duration commitments is that it may be difficult to exit without disrupting financial markets. Imagine the case of a central bank that has promised to cap a long-term bond yield. When the central bank eventually stops intervening and allows the yield to rise above the cap, bondholders face immediate capital losses. Consequently, if bondholders come to believe that the central bank will stop intervening in the near term, they may sell immediately. In such circumstances, the only way to sustain the cap would be for the central bank to buy *all* the bonds.

Compared to an unconditional policy duration commitment, exit is less difficult from a conditional commitment, but bond market conditions may prove fragile whenever the central bank begins to tighten after a period of stable, low rates. In 1994, even in the absence of a prior policy commitment, U.S. bond yields jumped shortly after the Fed began to hike rates in small steps. The Fed's 2004 promise to tighten only at a "measured pace" was designed to avoid a repeat of this shock in the bond market, but it probably helped to keep financial conditions accommodative for too long.

The natural conclusion from these experiences is that policy duration commitments are difficult to calibrate and can have disturbing side effects, so that policymakers cannot reliably predict their impact. As such, they remain tools for unusual circumstances when the conventional policy toolbox is largely empty.