

Unconventional monetary policy measures

In certain crisis situations, traditional monetary policy instruments may become ineffective. Central banks are then led to use so-called unconventional measures. The purpose of this Focus is to present these measures and the reasons for their use. It does not aim to comment on central banks' existing practices.

Why use unconventional measures?

Central banks use unconventional measures when monetary policy transmission channels no longer function satisfactorily. We need therefore to describe these traditional channels in order to understand the circumstances under which it may be useful to turn to unconventional mechanisms.

1| The main monetary policy transmission channels

In order to achieve their objectives, the primary one being price stability, central banks have one main instrument at their disposal: the setting of the key policy rate, which is the interest rate at which commercial banks obtain refinancing from the central bank, generally over the very short term, between one and several days. The level and changes in the policy rate affect the economy via two main transmission channels: the interest rate channel and the credit channel.

The interest rate channel

There are many different interest rates on the financial markets, each of which corresponds to a specific maturity and category of borrowers. They can be represented in the form of a "yield curve", which defines, for a given category of borrowers, the yield at each maturity (3 months, 6 months, 1 year, 2 years, 10 years, etc., up to 30 or 40 years).¹ The yield curve is generally positively sloped, with long-term rates higher than short-term ones.

It is via the yield curve, its level and slope, that changes in policy rates pass through to the economy. The shape of the yield curve is therefore essential for the transmission of monetary policy. It is primarily determined by three factors:

- ✓ **Expected future changes in short-term rates.** It has been shown that if the markets expect short-term rates to rise in the future, there is a proportional increase in long-term rates. In fact, the 10-year rate, for example, is equal to the (10) expected one-year rates for each of the forthcoming 10 years added together.
- ✓ **Uncertainty surrounding these interest rate expectations,** which is reflected in a specific risk premium. The greater the uncertainty about future short-term rates, the higher long-term rates are. This is one of the reasons why central banks are concerned to maintain their credibility: with expectations well anchored, risk premia are lower.

¹ In fact, we plot a yield curve for government bonds, with governments regarded as the least risky type of borrower; the rates for other borrowers (companies, households) are calculated by adding a risk premium that is determined by the borrower's creditworthiness.

✓ Lastly, long-term rates are affected by the supply and demand of securities of different maturities. For example, if insurance companies increase their demand for 10-year government bonds, the price of these securities rises and the interest rate on them falls. Conversely, if the fiscal deficit widens, the government has to issue more bonds: their supply increases, the price falls and the interest rate the issuing government has to pay on them rises.

By setting its policy rate, the central bank aims to influence all of the rates that affect the national economy:

✓ All other things being equal, a change in the policy rate produces a shift in the yield curve, at least at the short end.

✓ If the central bank is credible, through its communication it can also influence future inflation expectations and thus the slope of the yield curve.

✓ It should be noted that the economy responds to the level of and changes in real interest rates, i.e. the difference between nominal market rates and expected inflation. The central bank also influences expected inflation, and therefore real interest rates, depending on how credible it is.

The credit channel

Not all economic agents – whether households or enterprises – have direct access to the financial markets. Many of them are dependent on bank credit. The bank credit channel is therefore important for the transmission of monetary policy. This channel complements the interest rate channel. Interest rates determine the cost of the resources that banks obtain on the money markets (short term) or financial markets (long term). Thus, the more expensive these resources, the less inclined banks are to lend and the higher the rates they lend at; in this situation, demand for credit decreases. Monetary policy thus has an impact both on the terms and conditions and the volume of the credit granted in the economy. These changes in the volume and conditions of bank lending in turn affect consumer and investment spending.

In the euro area, banks provide 75% of the economy's financing needs, compared with 10%, for example, in the United States. The credit channel is therefore particularly important in monetary policy transmission.

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2| Situations where the transmission channels become ineffective

The interest rate channel may become blocked in two situations:

✓ First of all, when the policy rate reaches the zero bound. By definition, it cannot be lowered further as interest rates cannot be negative. This situation is particularly damaging if expected inflation is negative. The central bank then loses its ability to influence real interest rates by means of its policy rate. Real rates may then become very high and continue rising, thus helping to trigger a deflationary spiral.²

✓ Even if the policy rate is not at zero, it may be impossible for the central bank to lower interest rates. This is the case if the economy falls – to use Keynes' term – into a "liquidity trap". In normal times, when there is surplus money in the economy, this prompts purchases of securities, which lowers interest rates.³ But this mechanism no longer works if the return on securities falls very low or holding them becomes too risky.⁴ In this situation, economic agents prefer to hoard money. The price of securities no longer rises and interest rates no longer fall.

² See Focus entitled "Deflation or disinflation?".

³ There is an inverse relation between bond prices and interest rates.

⁴ Particularly if it is judged that the probability of long-term rates rising, and therefore of capital losses, is now greater than that of their falling.

The credit channel becomes blocked when the banking system ceases to function normally and credit flows to the economy slow or dry up. This may occur if:

- ✓ banks suffer losses (for examples linked to subprimes) that reduce their capital base and their ability to lend;
- ✓ economic conditions deteriorate sharply, making credit riskier and lenders warier;
- ✓ economic uncertainty grows, which raises risk premia, increases the cost of banks' resources and deters borrowers;
- ✓ the interbank market – banks' main source of refinancing – seizes up because of participants losing confidence in one another.

■ What forms can unconventional monetary policy measures take?

As regards the above cases where the main transmission channels become blocked, unconventional monetary policy measures can take three forms, or combinations thereof. These measures aim respectively to:

- increase massively the quantity of money in circulation in the economy. This is known as “quantitative easing”;
 - influence the slope of the yield curve by committing to the future path of policy rates in order to guide economic agents' expectations;
 - unfreeze the credit markets by directly purchasing the securities on these markets in order to exert downward pressure on risk premia. This is known as “credit easing”.
- ✓ **Massive money creation** aims to circumvent the obstacle of a blocked interest rate channel. The central bank attempts to “satisfy” economic agents' demand for money, in the hope that these agents will directly spend their excess cash holdings. In some ways, this is tantamount to creating a new monetary policy transmission channel that does not depend on the interest rate. Under normal circumstances, this direct money supply channel cannot be used since the demand for money (the amount of money that economic agents wish to hold) is unstable in the short term: there is no clear link between the quantity of money and the economic situation. Under exceptional circumstances, this short-term instability is less problematic if the central bank is willing to offer an unlimited supply of money.⁵ It is nevertheless not certain that even an unlimited supply of money would suffice to rekindle spending if the demand for money is itself infinite. This is why, very often, the supply of money is channelled to the only agent that will definitely spend it, i.e. the government via its fiscal deficit. The purchase of government bonds by central banks is therefore one of the most widely used forms of quantitative easing.
- ✓ **Influencing the yield curve by guiding expectations.** To do this, the central bank can commit explicitly to keeping its policy rate at a very low level (or even zero) for a considerable period. It can also establish the conditions for raising this interest rate in the future: for example, it can guarantee that no tightening will take place unless inflation reaches a certain level. This strategy is even more effective if the central bank's monetary policy framework includes a quantified definition of price stability, which then acts as an explicit reference. Under this policy, it may also extend the maturity of its refinancing operations beyond the usual period of a few days.

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⁵ Since excess liquidity naturally constitutes an inflationary risk in the medium term, it is therefore necessary to establish exit strategies from quantitative easing.

✓ Lastly, if the credit channel is blocked, the central bank can stand in for commercial banks and the market and directly finance the economy. This is known as “credit easing”. In concrete terms, the central bank can first broaden the range of eligible assets for its refinancing operations⁶ and second directly purchase the following debt securities: commercial paper, corporate bonds, mortgage-backed securities, etc. These operations have a two-fold impact: they revive the markets for these credit instruments and they directly provide financing to the economy. In return, however, the central bank must take on credit and interest rate risks that it would not incur under normal circumstances.⁷ Credit easing measures are more effective in economies where companies primarily obtain financing by issuing commercial paper or bonds and where loans to households (mortgages and consumer credit) are largely securitised and therefore mainly financed by the markets. By contrast, where the bulk of financing relies on bank intermediation, quantitative easing measures or those that influence the yield curve appear to be more relevant.

Unconventional monetary policy measures can be summed up as follows:

Unconventional monetary policy measures

Type of measure/aim	Purchases of government securities	Purchases of private securities	Commitment to keeping rates at a low level
Increasing the quantity of money in the economy	Yes	Yes, if no sterilisation	No
Guiding inflation expectations and influencing the yield curve	Yes	Yes, through risk premia	Yes
Unfreezing the credit markets	No	Yes	No

This rapid overview of unconventional monetary policy measures and their uses⁸ underscores the variety of instruments that central banks have at their disposal to conduct monetary policy. Even when they have already cut key interest rates very substantially and the markets no longer function or bank lending is blocked, they still have powerful tools with which to influence the cost of financing the economy.

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⁶ In order to obtain financing from central banks, commercial banks must pledge collateral, usually in the form of government bonds or very high quality assets; by easing these criteria, the central bank encourages banks to grant loans that are then accepted as collateral.

⁷ It can protect itself from these risks in various ways: State guarantees, purchasing securities when their price is very low and the risk of additional losses is limited.

⁸ For further details see, for example, “Unconventional monetary policy measures in response to the crisis”, Olivier Loisel and Jean-Stéphane Mésonnier in the series “Current issues (Questions actuelles)”, No. 1, April 2009.