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Monetary Policy: Stabilizing Prices and Output

FINANCE & DEVELOPMENT

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Central banks use tools such as interest rates to adjust the supply of money to keep the economy humming

Monetary policy has lived under many guises. But however it may appear, it generally boils down to adjusting the supply of money in the economy to achieve some combination of **inflation** and output stabilization.

Most economists would agree that in the long run, output—usually measured by **gross domestic product** (GDP)—is fixed, so any changes in the money supply only cause prices to change. But in the short run, because prices and wages usually do not adjust immediately, changes in the money supply can affect the actual production of goods and services. This is why monetary policy—generally conducted by central banks such as the U.S. Federal Reserve (Fed) or the European Central Bank (ECB)—is a meaningful policy tool for achieving both inflation and growth objectives.



Cash on the nail (photo: Agencia Estado/Corbis)

In a recession, for example, consumers stop spending as much as they used to; business production declines, leading firms to lay off workers and stop investing in new capacity; and foreign appetite for the country's exports may also fall. In short, there is a decline in overall, or aggregate, demand to which government can respond with a policy that leans against the direction in which the economy is headed. Monetary policy is often that countercyclical tool of choice.

Such a countercyclical policy would lead to the desired expansion of output (and employment), but, because it entails an increase in the money supply, would also result in an increase in prices. As an economy gets closer to producing at full capacity, increasing demand will put pressure on input costs, including wages. Workers then use their increased income to buy more goods and services, further bidding up prices and wages and pushing generalized inflation upward—an outcome policymakers usually want to avoid.

Twin objectives

The monetary policymaker, then, must balance price and output objectives. Indeed, even central banks, like the ECB, that target only inflation would generally admit that they also pay attention to stabilizing output and keeping the economy near full employment. And at the Fed, which has an explicit "dual mandate" from the U.S. Congress, the employment goal is formally recognized and placed on an equal footing with the inflation goal.

Monetary policy is not the only tool for managing aggregate demand for goods and services. **Fiscal policy**—taxing and spending—is another, and governments have used it extensively during the recent global crisis. However, it typically takes time to legislate tax and spending

changes, and once such changes have become law, they are politically difficult to reverse. Add to that concerns that consumers may not respond in the intended way to fiscal stimulus (for example, they may save rather than spend a tax cut), and it is easy to understand why monetary policy is generally viewed as the first line of defense in stabilizing the economy during a downturn. (The exception is in countries with a fixed exchange rate, where monetary policy is completely tied to the exchange rate objective.)

Independent policy

Although it is one of the government's most important economic tools, most economists think monetary policy is best conducted by a central bank (or some similar agency) that is independent of the elected government. This belief stems from academic research, some 30 years ago, that emphasized the problem of *time inconsistency*. Monetary policymakers who were less independent of the government would find it in their interest to promise low inflation to keep down inflation expectations among consumers and businesses. But later, in response to subsequent developments, they might find it hard to resist expanding the money supply, delivering an "inflation surprise." That surprise would at first boost output, by making labor relatively cheap (wages change slowly), and would also reduce the real, or inflation-adjusted, value of government debt. But people would soon recognize this "inflation bias" and ratchet up their expectations of price increases, making it difficult for policymakers ever to achieve low inflation.

To overcome the problem of time inconsistency, some economists suggested that policymakers should commit to a rule that removes full discretion in adjusting monetary policy. In practice, though, committing credibly to a (possibly complicated) rule proved difficult. An alternative solution, which would still shield the process from politics and strengthen the public's confidence in the authorities' commitment to low inflation, was to delegate monetary policy to an independent central bank that was insulated from much of the political process—as was the case already in a number of economies. The evidence suggests that central bank independence is indeed associated with lower and more stable inflation.

Conducting monetary policy

How does a central bank go about changing monetary policy? The basic approach is simply to change the size of the money supply. This is usually done through open-market operations, in which short-term government debt is exchanged with the private sector. If the Fed, for example, buys or borrows Treasury bills from commercial banks, the central bank will add cash to the accounts, called reserves, that banks are required keep with it. That expands the money supply. By contrast, if the Fed sells or lends treasury securities to banks, the payment it receives in exchange will reduce the money supply.

While many central banks have experimented over the years with explicit targets for money growth, such targets have become much less common, because the correlation between money and prices is harder to gauge than it once was. Many central banks have switched to inflation as their **target**—either alone or with a possibly implicit goal for growth and/or employment.

When a central bank speaks publicly about monetary policy, it usually focuses on the interest rates it would like to see, rather than on any specific amount of money (although the desired interest rates may need to be achieved through changes in the money supply). Central banks tend to focus on one "policy rate"—generally a short-term, often overnight, rate that banks charge one another to borrow funds. When the central bank puts money into the system by buying or borrowing securities, colloquially called loosening policy, the rate declines. It usually rises when the central bank tightens by soaking up reserves. The central bank expects that changes in the policy rate will feed through to all the other interest rates that are relevant in the economy.

Transmission mechanisms

Changing monetary policy has important effects on aggregate demand, and thus on both output and prices. There are a number of ways in which policy actions get transmitted to the real economy (Ireland, 2008).

The one people traditionally focus on is the *interest rate channel*. If the central bank tightens, for example, borrowing costs rise, consumers are less likely to buy things they would normally finance—such as houses or cars—and businesses are less likely to invest in new equipment, software, or buildings. This reduced level of economic activity would be consistent with lower inflation because lower demand usually means lower prices.

But this is not the end of the story. A rise in interest rates also tends to reduce the net worth of businesses and individuals—the so-called *balance sheet channel*—making it tougher for them to qualify for loans at any interest rate, thus reducing spending and price pressures. A rate hike also makes banks less profitable in general and thus less willing to lend—the *bank lending channel*. High rates normally lead to an appreciation of the currency, as foreign investors seek higher returns and increase their demand for the currency. Through the *exchange rate channel*, exports are reduced as they become more expensive, and imports rise as they become cheaper. In turn, GDP shrinks.

Monetary policy has an important additional effect on inflation through expectations—the self-fulfilling component of inflation. Many wage and price contracts are agreed to in advance, based on projections of inflation. If policymakers hike interest rates and communicate that further hikes are coming, this may convince the public that policymakers are serious about keeping inflation under control. Long-term contracts will then build in more modest wage and price increases over time, which in turn will keep actual inflation low.

When rates can go no lower

After the onset of the global financial crisis in 2008, central banks worldwide cut policy rates sharply—in some cases to zero—exhausting the potential for cuts. Nonetheless, they have found unconventional ways to continue easing policy.

One approach has been to purchase large quantities of financial instruments from the market. This so-called *quantitative easing* increases the size of the central bank's balance sheet and injects new cash into the economy. Banks get additional reserves (the deposits they maintain at the central bank) and the money supply grows.

A closely related option, *credit easing*, may also expand the size of the central bank's balance sheet, but the focus is more on the composition of that balance sheet—that is, the types of assets acquired. During the recent crisis, many specific credit markets became blocked, and the result was that the interest rate channel did not work. Central banks responded by targeting those problem markets directly. For instance, the Fed set up a special facility to buy commercial paper (very short-term corporate debt) to ensure that businesses had continued access to working capital. It also bought mortgage-backed securities to sustain housing finance.

Some argue that credit easing moves monetary policy too close to industrial policy, with the central bank ensuring the flow of finance to particular parts of the market. But quantitative easing is no less controversial. It entails purchasing a more "neutral" asset, like government debt, but it moves the central bank toward financing the government's fiscal deficit, possibly calling its independence into question.

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Reference

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