How Negative Interest Rates Work

By MATTHEW JOHNSTON | Updated Mar 17, 2020

Interest rates are often defined as the price paid to borrow money. For example, an annualized 2% interest rate on a $100 loan means that the borrower must repay the initial loan amount plus an additional $2 after one full year. So what does it mean when we have a negative interest rate—meaning borrowers are credited interest, instead of being charged it? That, say, a -2% interest rate means the bank pays the borrower $2 after a year of using the $100 loan?

At first glance, negative interest rates seem like a counterintuitive, if not downright crazy, strategy. Why would a lender be willing to pay someone to borrow money, considering the lender is the one taking the risk of loan default? Inside-out as it might appear, though, there are times when central banks run out of policy options to stimulate their nations' economies and turn to the desperate measure of negative interest rates.

KEY TAKEAWAYS

- Negative interest rates are an unconventional, and seemingly counterintuitive, monetary policy tool.
- Central banks impose the drastic measure of negative interest rates when they fear their national economies are slipping into a deflationary spiral, in which there is no spending—and hence, dropping prices, no profits, and no growth.
- With negative interest rates, cash deposited at a bank yields a storage charge, rather than the opportunity to earn interest income; the idea is to incentivize loaning and spending, rather than saving and hoarding.
- In recent years, several European and Asian central banks have imposed negative interest rates on commercial banks.

Negative Interest Rates in Theory and Practice

Negative interest rates are not only an unconventional monetary policy tool, but they are also a recent one. Sweden's central bank was the first to deploy them: In July 2009, the Riksbank cut its overnight deposit rate to -0.25%.[1] The European Central Bank (ECB) followed suit in June 2014 when it lowered its deposit rate to -0.1%.[2] Other European countries and Japan have since opted to offer negative interest rates, resulting in $9.5 trillion worth of government debt carrying negative yields in 2017.[3]

Why did they take this drastic measure? The monetary policymakers were afraid that Europe was at risk of falling into a deflationary spiral. In harsh economic times, people and businesses tend to hold on to their cash while they wait for the economy to improve. But this behavior can weaken the economy further, as a lack of spending causes further job losses, lowers profits, and prices to drop—all of which reinforces people's fears, giving them even more incentive to hoard. As spending slows even more, prices drop again, creating another incentive for people to wait as prices fall further. And so on.

This is precisely the deflationary spiral that European central banks are trying to avoid with the negative-interest strategy, which not only affects bank loans but bank deposits.

When you deposit money in an account at a financial institution, you are in effect becoming a lender—letting the bank have use of your funds—and the institution effectively becomes a borrower.

With negative interest rates, cash deposited at a bank yields a storage charge, rather than the opportunity to earn interest income. By charging European banks to store their reserves at the central bank, the policyholders hope to encourage banks to lend more.

In theory, banks would rather lend money to borrowers and earn at least some interest as opposed to being charged to hold their money at a central bank. Additionally, negative rates charged by a central bank may carry over to deposit accounts and loans. This means that deposit holders would also be charged for parking their money at their local bank while some borrowers enjoy the privilege of actually earning money by taking out a loan.

Another primary reason the ECB has turned to negative interest rates is to lower the value of the euro. Low or negative yields on European debt will deter foreign investors, thus weakening demand for the euro. While this decreases the supply of financial capital, Europe's problem is not one of supply but of demand. A weaker euro should stimulate demand for exports and, hopefully, encourage businesses to expand.

Risks of Negative Interest Rates

In theory, negative interest rates should help to stimulate economic activity and stave off inflation, but policymakers remain cautious because there are several ways such a policy could backfire. Because banks have certain assets such as mortgages that are contractually tied to the prevailing interest rate, such

negative rates could squeeze profit margins to the point where banks are actually willing to lend less.

There is also nothing to stop deposit holders from withdrawing their money and stuffing the physical cash in mattresses. While the initial threat would be a run on banks, the drain of cash from the banking system could lead to a rise in interest rates—the exact opposite of what negative interest rates are supposed to achieve.

Although the Federal Reserve, the U.S. central bank, has never imposed negative interest rates, it has come close with near-zero rates—most recently on Mar. 15, 2020, when it cut the benchmark interest rate to a 0%–.25% range.

The Bottom Line

While negative interest rates may seem paradoxical, this apparent intuition has not prevented a number of European and Asian central banks from adopting them. This is evidence of the dire situation that policymakers believe is characteristic of the European economy. When the Eurozone inflation rate dropped into deflationary territory at -0.6% in Feb. 2015, European policymakers promised to do whatever it took to avoid a deflationary spiral. However, even as Europe entered unchartered monetary territory, a number of analysts warned that negative interest rate policies could have severe unintended consequences.[4]