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Negative Interest Rates: Rewriting Economic Textbooks

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In the past, economic textbooks made no mention of negative interest rates. But after several central banks—Switzerland, Sweden, Denmark, the Eurozone, and most recently the Bank of Japan—introduced negative policy rates, textbooks will need to explain the rationale for and implications of negative interest rates.

Negative interest rates were introduced following a series of unsuccessful monetary policies that failed to increase inflation and strengthen economic growth rates. Monetary policy by itself has limitations and cannot be expected to deliver higher economic growth rates. Fiscal policy and structural reform are needed as well, and they have not occurred in the post-Great Recession recovery.

To illustrate, think of people digging a hole in search of oil. When they don't find oil, they continue to dig a bigger and bigger hole while standing in it. Ultimately, they are unable to get out of the hole, and they never find oil.

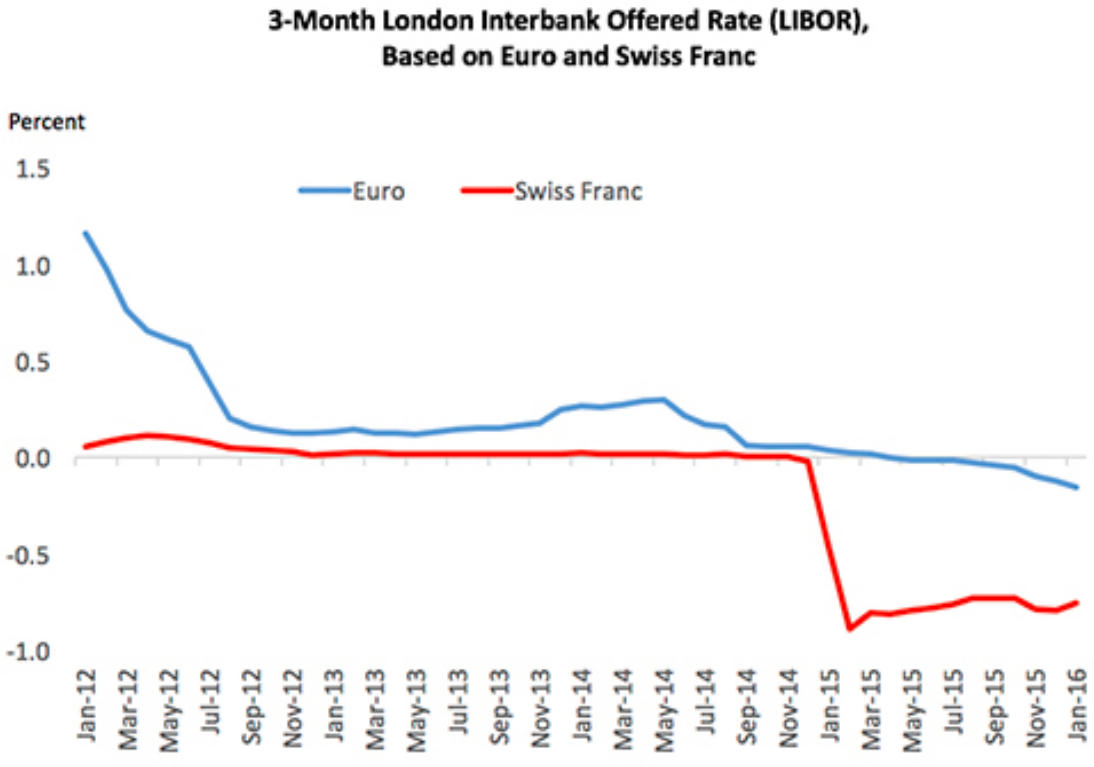
How Going Negative Works

So why would central banks introduce negative rates (see figure)? In essence, their aim is to increase short-term growth like the European, Swedish, and Japanese central banks while the goal of central banks of Switzerland and Denmark in large part is to offset considerable pressures on their currencies by limiting capital inflows.

When inflation is low, negative interest rates theoretically stimulate short-term growth, which boosts credit by deterring saving and encouraging borrowing. When the central bank imposes negative nominal deposit rates on commercial banks, it should encourage them to expand lending.

However, there are two possibilities here. Commercial banks can pass on the negative interest rates to their customers, which hurts depositors, perhaps even causing them to hoard cash "under the mattress" instead of depositing. In Japan, an increase in home safe purchases offers anecdotal evidence of this.

If negative interest rates are not passed to the depositor, the negative deposit rates set by the central bank do not incentivize commercial banks to lend more. Raising asset prices by reducing the discount rate on cash flows



Source: ICE Benchmark Administration Limited (IBA) and Federal Reserve Bank of St. Louis

from assets, such as dividends or rents, is also possible. It's temporary, but the short-term exuberance generates a feel-good effect.

It also forces investors from safe assets to riskier ones, creating an incentive to search for higher yields and lowering the spread between the returns of risky and low-risk assets. In the search for yield, investors also reach for duration, pushing the term premium into negative territory. The downside is shaken investor confidence. This could also fuel negative expectations about the future, causing a firm to invest less and the consumer to spend more.

Finally, exchange rate depreciation can boost net exports, and hence growth and employment, while raising inflation through higher import prices, and by attempting to nudge inflation up toward the central bank inflation objectives to avoid a deflationary spiral. Countries concerned about capital-flow-driven appreciation with negative interest rates discourage capital inflows.

Risks Involved

There are risks when introducing negative interest rates. One is that with interest rates so low, governments have no incentive to reduce their debt. Negative rates actually encourage them to borrow more, creating a clear disincentive for fiscal discipline. Another risk is that when financial markets are fixated on the "only game in town" monetary policy, they are distracted from the real economic policy challenges of implementing structural reforms.

Asset price distortions are another risk when the decisions of central banks become the main drivers for prices in global financial markets. They supersede the role of economic fundamentals in setting market valuations. Extended low-interest rates can cause disruptions in the financial markets, implying substantial risks to financial stability. Another risk is that if employment and growth do not materialize, it would have a negative effect on central banks' credibility.

Negative Experience

In the European countries, short-term money market rates declined along with policy rates. While it is hard to distinguish the effects of the rate cuts from those of concurrent asset purchase expansions, the easing appears to have been transmitted to assets with longer maturity and greater risk. Bond yield and bank lending rates

declined, and, in the euro area, the volume of lending to corporations and households picked up considerably. In addition, the rate cuts into negative territory have acted as expected through the exchange rate channel, depreciating the currency.

Until now, negative policy rates generally have not been associated with anticipated problems. Adverse effects on money market functioning have been limited. Cash holdings have not risen significantly in these countries, in part because of the high cost of insuring, storing, and transporting physical cash. These outcomes may be explained by significant shares of deposits in these countries' central banks, which are not subject to negative rates. In Japan, savers have been amassing cash since interest began approaching zero in the 1990s.

Will Fed Employ Negative Rates in Future Crises?

One possible concern with implementing this type of policy in the United States is the potential for destabilizing effects in money markets. Various market observers have noted concerns that negative rates could lead to scenarios in which money market funds' income does not cover operating expenses or investment losses, or the funds simply shut down, either of which would generate trouble in money markets.

Another concern is whether the complex and interconnected infrastructure supporting transactions in the U.S. financial system could readily adapt to negative interest rates. There could be automated systems that are not coded properly at present to process transactions based on instruments with negative rates. These are transitional problems, and the systems could be modified over time.

The same would be true if negative rates were to pull Treasury bill yields into negative territory. The U.S. Treasury would encounter difficulties because it cannot accept negative rates at its auctions, although it could presumably modify its systems as well. Some legal issues also have to be clarified because it is not clear that the Federal Reserve Act permits negative interest rates.

Another issue is that sufficiently large negative rates might cause depository institutions to shift a significant quantity of their reserve balances into currency. The exact point at which it would become cost effective to convert reserve balances to currency is uncertain, though it would presumably differ from bank to bank. This would lead to attempts by the depository institutions to pass along the costs associated with holding excess reserves to investors and depositors. This could induce some trading in short-term markets at negative rates, although competitive pressures and expected duration of the negative rate would likely determine the actual impact on rates.

The pass-through to market rates could be limited by the government-sponsored enterprises—such as Fannie Mae and Freddie Mac—and Federal Home Loan Banks. If a negative rate did not apply to these institutions, they would be in a position to arbitrage the reserves market. They could accept balances from market participants at rates just slightly below zero to earn a risk-free zero return. However, it is difficult to know the extent to which these participants would be willing to expand their balance sheets to conduct such arbitrage.

Beyond their possible effect on market interest rates, negative rates would likely result in dramatically reduced trading volumes in funding markets and in further reductions in the profitability of money market funds, with an increased likelihood that some of these funds would leave the market.

If the Federal Reserve was even considering implementing negative rates it would mean that the economy is possibly entering or in the midst of a recession and no other possible policy could be implemented, meaning that the economy is in a sad state.

Monetary Policy Not a Panacea

Negative interest rates rely on transmission channels with uncertain effectiveness and potentially serious unintended consequences. This poses a danger that monetary policy can become subordinated to the demands of bolstering up the financial markets, affecting the exchange rate downward and keeping public financing costs low in the face of public debt burdens.

The enthusiasm of market participants for extreme accommodative monetary policy conceals the fear that asset prices may collapse when the music of monetary easing stops. Borrowing growth from the future is not sustainable. We must recognize the limitations of monetary policy as a solution to lack of economic growth when price stability is a necessary condition but not a sufficient one. To achieve long-run sustainable growth, monetary policy must be accompanied by fiscal policy and structural reform.

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