The Disruptive Discoveries Journal

Analysis of how disruption in commodities, geopolitics, and macroeconomics converge to create opportunities

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Negative Interest Rates: A Primer

It is widely acknowledged that credit is the lifeblood of an economy. It provides the leverage for growth. The interest rate assigned to a fixed income security can then be thought of as the "cost" or "price" of the credit.

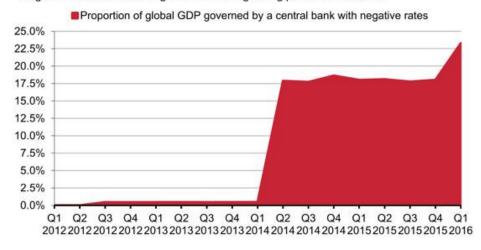
This makes sense as lenders want to ensure their assets (cash, typically) earn a return above the risk free rate. To be clear, there is much more to determining an interest rate, but this is the basic premise.

What happens, though, when that rate goes negative?

This note is a primer on negative interest rates, a phenomenon not unheard of, but increasingly en vogue in the wake of the Bank of Japan's surprising (or maybe not so surprising) announcement to set the interest rate they charge commercial banks to deposit money at the BoJ at -0.1%. This follows the path set by the Danish central bank in 2012 and was soon followed by the European Central Bank in 2014 and the Swedish and Swiss central banks in 2015. According to the Wall Street Journal, now 23% of global GDP is operating in a negative interest rate environment. We can't find any historical parallel here. The implication is that central banks, through policies such as quantitative easing, may have steered an interconnected global economy into uncharted waters as these measures haven't spurred inflation and in fact may have accelerated deflationary forces.

Taking the plunge

Negative rates are becoming the norm for a growing portion of the world

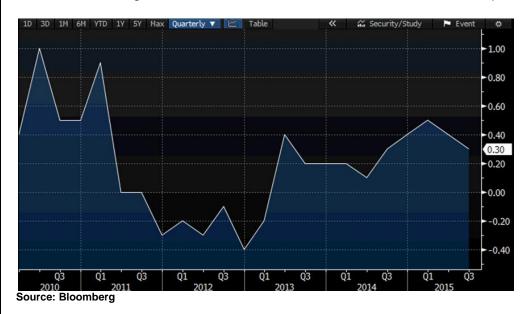


Source: FactSet, Oxford Economics, GDP share measured in nominal U.S. dollars | WSJ.com

What are negative interest rates?

A country's commercial banks are able to "deposit" their reserves with the central bank and earn interest. The central bank typically allows this as the deposits can earn interest and help the commercial bank in question bolster its capital base until it locates opportunities for lending. In a negative rate scenario, the central bank charges the charges bank who has parked their cash there for this "privilege". This would be akin to your bank charging you to maintain a savings account and not offering any interest on the account balance.

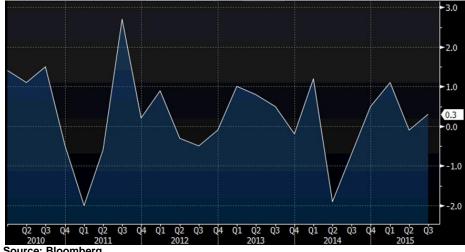
This policy has been undertaken by various central banks to encourage lending and theoretically boost economic growth. Growth in the Euro Zone since 2010 on a quarterly basis:



ECB officials there instituted a negative rates policy in mid 2014. Has it worked?

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In Japan:



Source: Bloomberg

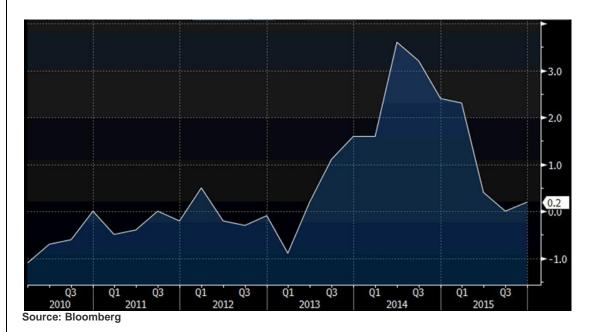
Japan has famously struggled with deflation since 1989. This interest rate cut is the latest salvo designed to enhance growth and generate inflation. BoJ officials are blaming this move on a weak global economy, exacerbated by sluggish trade and uncertainty with China rather than endemic weakness in the Japanese economy. These charts show just how anemic growth has been and provide clarity into why these respective central banks have taken the step of forcing banks to lend.

Is this step unprecedented?

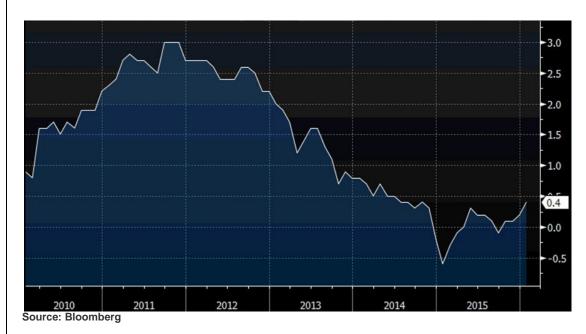
As we said above, the central banks of Denmark, the ECB, Sweden, and Switzerland have introduced this policy in recent years (2012, 2014, and 2015 respectively) and the results are unclear. Each central bank had its own motives such as defending the currency in addition to trying to generate inflation. It appears that this move is borne more of desperation rather than sound and effective policy making. The goal is a targeted inflation rate of 2% and though the measurement is controversial, central banks almost everywhere are falling short of this goal and negative interest rates are one of the few options left. While the size of this move in Japan (around .1%) isn't huge, the idea that an increasing number of banks are willing to resort to this tactic is significant. According to the Wall Street Journal,

"Never before have so many central banks explored sub-zero territory at the same time."

Inflation rates in Japan are shown below (core CPI):



...and in the Euro Zone:

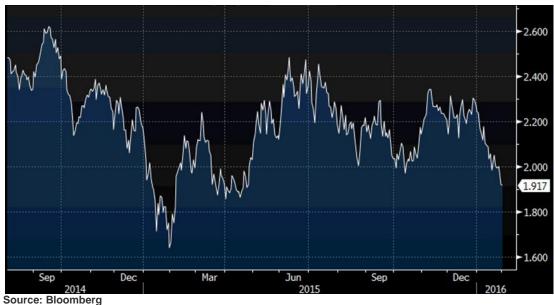


How will we know if it is working?

While the policy isn't likely to affect the consumer on a day-to-day basis, watching inflation data as well as money multiplier data could be good clues. The real risks lie with the threat of moral hazard in that banks, now forced to lend, could go on a hunt for higher risk opportunities, putting their capital at significant risk. This is how bubbles form: cheap money looking for a higher return until interest rates "normalize".

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While we wait and see, a key area of focus is the government bond market. After the BoJ announcement last week, the US 10 Year Government bond nosedived to 1.92%, well below the psychologically important 2% level.



Any implications for the natural resource sector?

It's unlikely that this small move will have any appreciable effect on the commodity sector. We view it as a stretch to believe that forcing commercial banks to lend and possibly search out risky projects could somehow rescue the commodity sector from its seemingly terminal decline. Ultimately supply and demand will rebalance, but negative interest rate scenarios imposed by central banks won't be the catalyst. Paradoxically, this may benefit the precious metals somewhat as no yield is preferable to a negative yield.

This policy of negative interest rates raises more questions than it answers, and that may be the true danger here. Central bank policy has clearly diverged with the US Federal Reserve seemingly biased towards increasing, rather than lowering, interest rates in stark contrast to much of the rest of the world. Did the Fed make a historic mistake in December? Is a stronger USD a given now as China reengineers its growth model and investors flee volatile financial markets?

We may be about to find out.

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