

In the 1960s, DC Comics introduced a new comic called Bizarro World where everything is backwards. The planet Htrae (earth spelled backwards) is square, not round, and is inhabited by a group of chalky, white-faced failed clones. The first Bizarro (called Bizarro No. 1) was created by Lex Luthor, who attempted to clone Superman using the duplicating ray. But Bizarro No. 1 was nothing like Superman, he was clumsy, destructive and

incapable of rational thought. On Htrae, Bizarro No. 1 possessed the same technology as the duplicating ray and proceeded to duplicate several personalities including Lois Lane and Marilyn Monroe. Of course, Bizarro Marilyn Monroe was popular among the Bizarro men because she was considered the ugliest woman in Htrae (quite a compliment on Htrae). Another famous character from Bizarro was a cloned Wall Street Banker, who became a successful trader on Htrae by selling Bizarro bonds that were "guaranteed to lose money for you!"

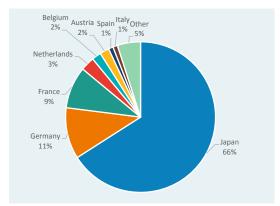


Source: DC Comics, Google Images

How would a bond guarantee a loss? With a typical bond or loan, the borrower pays the lender interest at a specified rate. In Bizarro World, the relationship is backwards and the lender pays the borrower to take their money (i.e., interest rates are negative instead of being positive). The comic book farce ridiculing the Bizarro inhabitants for investing in bonds guaranteed to lose money seems justified, after all, a rational person would not pay someone else to take their money – they would just keep it instead.

In the seminal tome, A History of Interest Rates, authors Sidney Homer and Richard Sylla traced interest rates back to the Egyptians in the Fertile Crescent in Mesopotamia, and in the 3,000 years since history, there was not a single instance of negative rates until 2014. Since then, nearly \$8 trillion in sovereign debt has moved to a negative yield, of which 66% comes from Japan and the remainder from Europe. To put this into perspective, in the \$43 trillion J.P. Morgan Aggregate bond universe, roughly 19% is trading in Bizarro World (negative rates). The U.S. remains a bastion of sanity, with 10-year US Treasuries offering the amazingly high yield

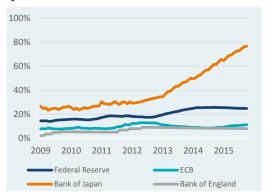
### **GLOBAL ALLOCATION OF NEGATIVE YIELDS**



Source: Bloomberg, JP Morgan, Verus

of 1.71% as of April 8th, 2016. Remember when everyone thought 10-year Treasuries were so rich at 5%, then 4%, then 3%? Well now at 1.7% they're considered cheap when compared to the rest of the sovereign debt universe. If the U.S. is removed from the Aggregate World Bond Index, an astonishing 46% of global sovereign debt is trading with a negative yield.

#### **QE AS % OF GDP**



Source: Federal Reserve, ECB, BOJ, BOE, Bloomberg, Verus

# **GLOBAL ECONOMIC GROWTH (GDP YOY)**



Source: OECD, BEA, Eurostat, Economic & Social Research Institute, Japan, Bloomberg, Verus

Lest you think the Bizarro World of negative rates is limited to sovereign bonds, the negative yield movement has now leaked into the corporate bond market with 16 billion worth of Euro-denominated corporate bond yields moving below zero. What in Htrae is going on? Why would otherwise rational investors purchase bonds guaranteed to lose them money? (Assuming interest rates remain unchanged – more on that below.)

Since the end of the global financial crisis (GFC), developed market central banks engaged in a series of extraordinary monetary stimulus programs (quantitative easing or QE) in an attempt to improve economic and market conditions. While Japan was the originator and introduced QE to the financial markets in the early 2000s, the Federal Reserve (Fed) led the other central banks coming out of the GFC with their QE stimulus program. Other developed market central banks quickly followed, with Japan clearly implementing the most aggressive policies.

The QE measures were an initial success as economic growth, market liquidity and asset prices all turned higher. Despite the initial success and over \$11 trillion in QE stimulus (including the Fed, ECB,

and BOJ), neither economic growth or liquidity conditions have been able to return to the levels seen before the GFC. For years we have openly questioned the economic effectiveness of the QE programs, and now with economic growth slowing and liquidity conditions in an outright contraction, one might wonder if the central banks have any tools left. While the Fed has ended their QE program and has been attempting to raise rates, the other developed market central banks have not only continued their QE programs, but have added a new stimulus program called negative interest rate policy (NIRP).

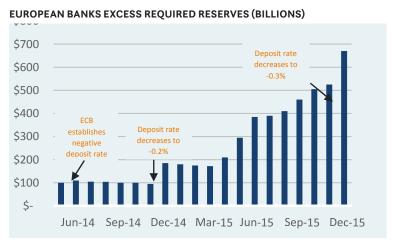
NIRP was first implemented in 2014, when the ECB established a negative deposit rate, quickly followed by Sweden, Denmark and Switzerland (with total sovereign debt with a negative yield increasing from \$0 to \$3 trillion in 2010) But it was not until the Bank of Japan (BOJ) implemented NIRP on January 29, 2015, that the market took these measures seriously. Why? Until the BOJ action, the market considered these moves more of a gimmick, or



Source: BofA, Merrill Lynch, Bloomberg, Verus

something the central banks were playing with — not really a monetary policy tool. Was it? After all, the Fed studied it in 2010 and concluded rates could not be lower than -0.35% or banks and individuals would begin to store/hoard currency and the economic impact would likely be small. If that is the case, why have these central banks implemented NIRP and what are some potential roadblocks?

At the most basic and fundamental level, negative rates have a structural limitation (-0.35% according to the Fed), as most rational investors (aka non-Bizarro thinking individuals) would simply choose to take their money out of the bank and hold currency (the old phrase of stuffing the mattress comes to mind). While not convenient or safe (risk of loss/theft and fire), at a punitive enough level, individuals will essentially



Source: BofA, Merrill Lynch, Bloomberg, Verus

become their own bank. In Japan, citizens are already clamoring for 10,000 yen bills and demand for home safes have soared. In Europe, demand for 500EUR and 1000CHF notes have increased. Economists call this the "zero lower bound" and the solution for overcoming this hurdle is simple - eliminate large denomination currencies. Of course, doing so, or even the threat of doing so, would only heighten concern.

The central banks implemented NIRP to encourage lending, hopefully leading to expanded credit, economic growth and inflation. However, the banks have not responded as the ECB had hoped. Since implementing NIRP in 2014, European banks have increased their excess required reserves six-fold. The ECB and other central banks are facing the same issues with NIRP as they struggle with for QE – the lack of global



demand. If \$11 trillion in QE stimulus was unable to generate sufficient, self-sustaining economic growth, how will NIRP?

The central banks face another challenge with NIRP, the financial system was not designed to function in the Bizarro World of negative rates. If someone buys a bond at a negative yield, we have no system for the borrower to collect money from the lender. How are Japan and Europe dealing with their negative yielding bonds? The coupon is set to zero and the investor buys the security at a premium. This raises several questions: what do you suppose the credit rating is on a negative rate bond? In theory it should be at least partially based upon the investor since they owe the borrower. How can we account for this? Should we account for this? How about at the local banks? You, the depositor, owe the bank for them holding your money. Do they charge you a monthly fee for your negative rate? If so, does it accrue so if you pull your money out the day before the interest charge the bank knows how much you owe? These are simple questions and we have no answers. Yet, the central banks have implemented these policies before providing the financial framework. (Anyone else thinking ready, FIRE, aim?) One more question, if the ECB and BOJ are telling us NIRP is a good policy tool (encouraging lending to stimulate growth), why stop at 50 or 75 basis points (bps)? Let's go all the way to -5%, just until the economy is really moving and inflation is back at the 2% target. Show of hands, how many think this is a good idea? Anyone? If a big move to -5% is bad then how can baby steps toward -5% be good? Maybe the logic works in Bizarro World.

The central bank NIRP programs are having a perverse impact on how bonds are trading. Japan can now borrow money for 40 years at a lower interest rate than the U.S. pays to borrow for two years. The U.S. pays 10 times as much as Germany to borrow for a decade. Though Germany still has to pay something, whereas Japan and Switzerland charge investors for the privilege of lending to them for a decade. Even Slovenia (rated

	2 year	5 Year	7 Year	10 Year	30 year
Switzerland	-1.00%	-0.84%	-0.66%	-0.38%	0.15%
Japan	-0.26%	-0.25%	-0.22%	-0.11%	0.40%
Germany	-0.52%	-0.38%	-0.24%	0.14%	0.84%
Netherlands	-0.51%	-0.39%	-0.03%	0.37%	0.99%
Finland	-0.45%	-0.23%	0.00%	0.44%	1.01%
Austria	-0.48%	-0.34%	-0.07%	0.35%	1.29%
Belgium	-0.49%	-0.29%	-0.07%	0.36%	1.60%
France	-0.47%	-0.24%	0.04%	0.50%	1.47%
Sweden	-0.65%	-0.15%	0.14%	0.51%	
Denmark	-0.51%	-0.18%		0.35%	0.91%
Ireland	-0.35%	-0.05%	0.36%	0.85%	1.82%
Italy	-0.01%	0.36%	0.76%	1.37%	2.50%
Spain	-0.01%	0.38%	0.87%	1.53%	2.65%
U.S.	0.72%	1.18%	1.50%	1.75%	2.58%

Source: Bloomberg, Verus

just one notch better than junk) was recently able to borrow money for 1 year for better than free (at -0.07%, to be precise). However, these aren't risk-free securities. Suppose you invested €1 million in the five-year benchmark German government bond, currently yielding -0.38% (costing you about €1,019,000). Now suppose that by the end of this year, the yield rose to 0.9 percent (where it started 2014). Your bonds would now be worth about €960,000; a loss of nearly 5.8%. Of course, you could hold to maturity and only lose the €19,000, but it does highlight the fact these bonds are sold by the Bizarro bond salesman, guaranteeing

### YEAR TO DATE TOTAL RETURNS (IN USD)



Source: S&P, Barclays, Markit, Bloomberg, Verus

you a loss unless interest rates continue to move lower. But if rates do move lower, they can still have a nice total return.

Since the beginning of the year, Japanese bonds (in USD) have produced the highest cumulative total return relative to other developed markets of nearly 10%. European bonds follow, producing over 6%, and U.S. Treasury is lagging behind producing only a near 3% return. To put these figures into perspective, this is one of the best starts ever for US bonds, and it's unable to keep up

with the other markets. Another interesting thing to note is the outperformance of gold. If the central banks are going to implement NIRP and the idea has been floated to remove large denomination paper currencies, investors have flocked to gold as a store of value.

### Conclusion

With slowing global growth, liquidity conditions contracting and inflation remaining stubbornly low in Europe and Japan, the ECB and BOJ have increased their monetary stimulus to include a negative interest rate policy (NIRP) to try and further stimulate growth. These NIRP programs have initially resulted in historically large short-term returns for the bond holders, however, unless interest rates continue to move lower, investors are guaranteed a loss. For over 3,000 years, the financial markets did not experience negative rates, and the central bank implementation without first providing a financial infrastructure raises many questions the markets are quite unsure as to answer.

Indeed, the bond markets have entered into the science fiction realm of Bizarro World where an investor has to pay someone else to take their money and makes earning 0% look relatively attractive.

Until next time,

#### Scott



## **ABOUT THE AUTHOR**



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After over a decade of diligently reading the daily, weekly and monthly publications of the major Wall St. firms, Scott came to a couple important conclusions: 1) all essentially held the same position, and 2) they were all bullish at tops and bearish at bottoms. These supposedly educated, informed and well-paid opinions offered little more than the collective opinion of the crowd (the "herd"). In "Not Herd on the Street," Scott will pull from his over 20 years of investment experience focusing on macro market analysis to discuss and analyze popular opinion, and will not accept the wisdom of the crowd, but will be driven by the data. Back in the stone age (during Scott's high school), his math teacher would write an exam where the answer would seem illogical. During the exam, she would walk around the room shouting "have the courage of your convictions!" His thoughts and opinions are not driven by the collective wisdom of the herd, but rather, they express the courage of his convictions.

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