CBIS®
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ACTIVE MANAGEMENT

Less Than Zero

AUGUST 2016

Borrowers pay to borrow and lenders get paid to lend — that's the way finance has worked for centuries. But something quite strange has happened over the past few years. Interest rates in much of Europe and in Japan have gone negative. In order to help CBIS participants make sense of negative yields, we asked three of our bond sub-advisers to offer their perspective on the "less-than-zero" phenomenon.

The time value of money is a bedrock of financial theory. As a creditor, you should expect to be paid when you defer consumption today and lend your hard earned money to a borrower. As a borrower, you should pay for the privilege of receiving money today that you otherwise would not have had until the future, if at all. Interest is the cost paid by the borrower and the compensation to the lender for deferring consumption and accepting default risk on the repayment of the loan. Logic holds that interest is a positive number, but that logic does not apply today in many government bond markets.

In fact, creditors who lend money to many sovereign nations in Europe (and to Japan) have to pay for the privilege — producing the strange phenomenon that the cost of borrowing is less than zero. As Q3 began, investors were willing to lend to Switzerland for 30 years at negative rates of return, Japan for 15 years and Germany and the Netherlands for ten years. Ten European nations had negative yields for five-year debt, while twelve had negative two-year yields. Negative yields turn traditional bond investing on its head. While investors do not send interest payments to borrowers, negative yields mean investors receive less in total future cash flow than the proceeds spent to acquire the bond.

Why would anyone lend at a negative rate? Widely cited reasons include: 1) the possibility of deflation (although deflation would have to be quite severe and prolonged to generate positive real rates of return on many bonds); 2) speculation that central bank bond purchases will lead to even more negative yields and even higher bond prices; and 3) investors' willingness to accept negative returns that are still higher than negative cash returns at banks.

In order to help CBIS participants make sense of negative yields, we asked three of our bond sub-advisers to offer their perspective on the "less-than-zero" phenomenon.

Summary

- As Q3 began, investors were willing to lend to Switzerland for 30 years at negative rates of return, Japan for 15 years and Germany and the Netherlands for ten years. Ten European nations had negative yields for five-year debt while twelve had negative two-year yields.

- Why would anyone lend at a negative rate? Widely cited reasons include: 1) the possibility of severe deflation; 2) speculation that central bank buying will lead to even lower yields; and 3) comparatively lower negative cash returns at banks.

- CBIS asked three of our active bond sub-advisers — Wellington (MMF), Longfellow (SBF/OBF) and Reams (OBF/IDBF) — to offer their perspective on the phenomenon of negative yields.

- Even with yields at historic lows, a bond allocation can still act as a risk reducer, hedging against deflation and pronounced equity market weakness. Investors who position bond allocations for stability and who avoid chasing yield by extending out the curve will likely achieve the best results.

Global Government Bond Yields at June 30, 2016

Maturity	1Y	2Y	3Y	4Y	5Y	6Y	7Y	8Y	9Y	10Y	15Y	20Y	30Y
Switzerland	-1.04	-0.99	-1.18	-1.12	-1.00	-0.90	-0.84	-0.76	-0.69	-0.62	-0.38	-0.23	-0.04
Japan	-0.33	-0.31	-0.31	-0.31	-0.32	-0.32	-0.32	-0.31	-0.29	-0.24	-0.11	0.06	0.12
Germany	-0.66	-0.67	-0.65	-0.63	-0.57	-0.54	-0.46	-0.39	-0.27	-0.14	0.01	0.20	0.38
Netherlands	-0.62	-0.61	-0.59	-0.57	-0.55	-0.46	-0.39	-0.27	-0.15	-0.02	0.07	0.32	0.51
Austria	-0.55	-0.56	-0.50	-0.47	-0.37	-0.33	-0.25	-0.17	-0.01	0.20	0.52	0.55	0.84
Sweden	-0.65	-0.64	-0.64	-0.56	-0.50	-0.28	-0.29	-0.01	-0.12	0.26	0.68	0.99	1.13
Belgium	-0.54	-0.55	-0.59	-0.54	-0.50	-0.40	-0.31	-0.21	-0.06	0.10	0.55	0.94	0.93
Finland	-0.61	-0.57	-0.56	-0.46	-0.42	-0.31	-0.10	-0.07	0.05	0.15	0.54	0.62	0.52
France	-0.56	-0.54	-0.50	-0.46	-0.35	-0.29	-0.19	-0.17	0.07	0.19	0.51	0.75	0.92
Denmark	-0.46	-0.59	-0.52	-0.47	-0.37	-0.32	-0.21	-0.10	0.02	0.07	0.44	0.48	0.44
Ireland	-0.35	-0.37	-0.32	-0.21	-0.05	0.01	0.16	0.36	0.46	0.52	0.81	1.00	1.24
Italy	-0.23	-0.08	-0.08	-0.06	0.12	0.34	0.54	0.76	0.96	1.25	1.62	1.92	2.31
Spain	0.03	-0.19	-0.15	0.03	0.23	0.30	0.53	0.90	1.05	1.23	1.98	2.31	2.32
Portugal	0.26	0.58	1.13	1.57	1.84	2.28	2.82	2.87	2.98	3.05	3.37	3.82	3.96
United States	0.44	0.58	0.70	0.97	1.00	1.15	1.28	1.37	1.43	1.47	1.70	1.91	2.28

Source: Factset

Wellington Management Company

CUIT Money Market Fund (100% of Assets)
Equity: CUIT Growth Fund) (50% of Assets)

For some time now, we have believed that the mere possibility of negative yields could lead to higher bond prices and a compression of yields across different regions and issuers. This is because bond prices should reflect a distribution of potential policy rates — a distribution that can now extend below zero. The global trend of downward-trending yields has in fact materialized and longer-duration assets have performed relatively well.

But where to from here? Currently, there seems to be no clear lower boundary for policy/short-term rates. The European Central Bank (ECB) and Bank of Japan (BOJ) may lower rates still further. But given the unintended consequences of negative rates to date, policymakers in the Eurozone and in Japan may shift their focus back to other unconventional tools, such as asset purchases (across a wider set of assets) and direct lending programs or guarantees.

For its part, the U.S. Federal Reserve (Fed) is considering negative rates as a possible policy tool, but at this point more as a contingency plan than a base case. There is even some question as to whether the Fed has statutory authority to cut rates below zero (the issue is currently being determined). The Fed will likely watch how negative policy rates play out for other countries before deciding whether to use such an approach as a primary tool for future easing initiatives.

Now that over 25% of the global bond market carries negative yields, the role of fixed income in investors' overall portfolios is coming under scrutiny. We believe short-duration fixed-income portfolios play a key role in broader portfolio diversification and provide capital preservation in this challenging market environment. U.S. dollar-denominated short-term securities continue to yield positive rates, attracting both domestic investors and those from offshore with low- or negative-yielding local alternatives. Short-duration investors may also benefit from an allocation to high-quality, short-maturity corporate bonds, which we believe will continue to perform well. Accommodative monetary policy from the ECB and BOJ, the cause of today's low to negative rates, should underpin global credit markets and generally lead to stable or lower spreads. In addition, corporate balance sheets remain strong and demand from investors seeking to escape negative yields provides a robust positive technical tailwind.

While low and even negative interest rates are not new, they present a challenge to investors traditionally looking to their fixed-income portfolios for income. Yet we believe an allocation to a short-duration portfolio that balances the yield objective with the goals of liquidity and preservation of capital, and that is invested in diversified sources of return, can remain an important tool in this unusual macroeconomic environment.

Longfellow Investment Management

CUIT Short Bond Fund (100% of Assets)
CUIT Opportunistic Bond Fund (50% of Assets)

In October 2008, the Federal Open Market Committee (FOMC) lowered its target overnight federal funds rate to a range of 0.50% to 1%. At the time, the range matched the lowest level ever for overnight rates, yet rates would eventually go even lower. Few people imagined in 2008 that, more than seven years later, the fed funds rate still needs to rise to reach that 1% level.

To put this in context, the accompanying chart shows the effective fed funds rates over the past 60 years. Since the early 1980s, we have experienced a fairly consistent trend of falling rates. Yet the last eight years have been extraordinary, both for the low level of rates and the length of time they have persisted.

Very low interest rates are not unique to the United States. Central banks around the world are taking extreme measures to spur economic growth. As of June 2016, close to 25% of global gross domestic product was produced in countries with negative interest rates; this is an increase from less than 1% two years ago. Countries with negative interest rates now include Japan, Germany, Sweden, Denmark and Switzerland. In effect, these countries are charging investors to hold their cash. With low growth and low inflation, the presumptive goal of negative rates is to drive growth in gross domestic product (GDP) and/or inflation by forcing corporations to reinvest their capital in their businesses rather than hold cash balances in banks.

While borrowers have enjoyed years of low interest rates, these are certainly challenging times for fixed-income investors. At Longfellow Investment Management (LIM) we focus on three elements when selecting securities for portfolios:

- Fundamentals — a bottom-up analysis to evaluate the quality of the bond issuer or the collateral supporting the issue;
- Technicals — any supply or demand imbalances, size or liquidity concerns, and market support and coverage;
- Valuation — an evaluation to determine if the price of a bond adequately compensates the investor for the risk being taken.

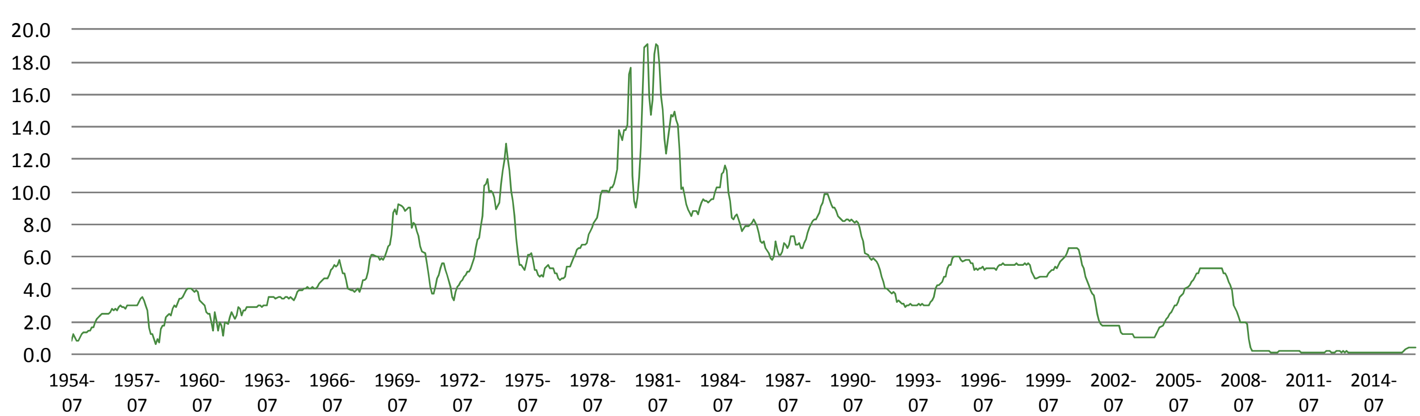
For several years, technical factors have taken a prominent role in the market. The low interest rate environment has emphasized the importance of evaluating Federal Reserve statements and decisions and has led some market pundits to dissect each word uttered by members of the FOMC.

More recently, the lack of yield outside the U.S. has made U.S. bonds more appealing for foreign investors. This inflow of foreign money has served to further drive down yields in U.S. Treasuries. For an investor in Japan or Europe, the opportunity to park cash in a safe haven with low but positive yields is now quite compelling.

In addition to weak economic growth suppressing yields, current banking regulations also contribute to the demand for U.S. bonds. U.S. and European banks are now charged capital on cash deposits, with limited opportunities to invest those funds. This has caused banks to charge up to 50 basis points per year on certain deposit balances, enhancing the incentive to invest at yields that, even if negative, are more favorable than the cost of such deposits.

Despite the technical factors holding yields low, we see many fundamental pressures in the other direction. The U.S. consumer continues to improve, with lower levels of debt, low

U.S. Federal Funds Rate: July 1954 through June 2016



Source: U.S. Federal Reserve

unemployment and positive wage growth. Many corporations have also made significant progress in deleveraging, although we are cautious on companies looking to reward shareholders with debt-funded share buybacks.

It is also important to remember that yields and returns are not the same; while they are closely tied, there are also opportunities to add value by analyzing fundamentals and finding unique securities with attractive valuations. The fixed-income market is varied and has pockets of inefficiency. It is made up of a large collection of buyers with many different goals; some are total return investors while others have liquidity or regulatory considerations, creating a market with diverse interests. We seek to use these inefficiencies to our advantage. As an example, we like to find issuers that are less-followed in the market due to their low levels of debt. In our view, if an industrial company does not need to consistently borrow money to fund operations, it is likely a better credit than a company making up a large portion of an index. Such companies often receive less attention from investors, thereby increasing the opportunities for bottom-up bond pickers like LIM.

It may be tempting to chase yield in lower-quality issuers, but history has taught us that avoiding the underperformers is more important than chasing a few outperformers. In a market with low rates and elevated volatility, pockets of value can still be found. LIM's focus on principal protection and consistent performance remains unchanged.

Reams Asset Management

CUIT Opportunistic Bond Fund (50% of Assets)
CUIT Intermediate Diversified Bond Fund (25% of Assets)

A large portion of global sovereign interest rates have descended into unprecedented negative territory. The starting catalyst was the use of negative deposit rates for financial institutions as a form of alternative monetary policy, first in Europe and now in Japan. In our opinion, the main objective of negative deposit rates is to devalue one's currency by making its carrying value unattractive. This, in turn, would spur economic growth through higher exports as well as higher inflation through costlier imported goods. A secondary objective is to spur borrowing by corporations and consumers through lower borrowing costs. After all, banks should want to lend money rather than pay the government to hold their reserves. We view negative interest rate policies (NIRP) as a futile attempt to increase growth through ever increasing monetary policy, likely when the efficacy of money printing (quantitative easing) is questionable.

Following Deposit Rates Down

In each sovereign market, the term structure of government rates is based on a host of factors, including overnight borrowing costs as well as inflation expectations. We believe the former has had the most pronounced impact on sovereign bond markets recently, causing 25% of all sovereign bonds (as weighted by GDP) to be trading with negative yields (according to Bloomberg). Momentum speculation seems to be having an impact as well. A question we often ask ourselves is how long would someone be willing to pay the Swiss government -0.41% per year to hold their money in a 10-year bond? Likewise, how long would one be willing to do the same in 10-year Japanese government bond at -0.14%? What reasons would there be for investors to hold 10-year sovereign bonds at such yields? Potential reasons include:

- Income— the allure of positive carry through borrowing at even lower yields;
- Momentum — the expectation of further bond buying translating to still lower yields;
- Real Rates — the view that future deflation will be high enough to make the realized *real return* attractive;
- Defense — the belief that despite negative yields, certain sovereigns possess the lowest risk alternative in an ultralow rate world.

We believe the main result is market participants reaching for income. Generally, corporate yields follow sovereign yields lower as spreads versus government bonds are maintained. Moreover, the spreads may actually tighten as punishingly low yields in the very short end of the curve encourage investors to wade into other realms of risk, including credit risk and/or term structure risk, as a way to achieve incremental income.

Reality and Risk Distortion

In our view, negative interest rate policies (NIRP) will have an impact similar to quantitative easing (QE), mainly distorting economic reality and encouraging excessive risk-taking. Reality is distorted because the natural supply and demand for credit is short-circuited. This is true of both QE and NIRP. As an example, credit spreads have been tightening in recent months despite the fact that credit fundamentals suggest demonstrable deterioration in quality, including rising leverage and foreboding trends in CCC-rated issuance, and a trend toward ratings downgrades exceeding upgrades.

Excessive and unwise risk taking occurs as investors are faced with unacceptably low returns on what have historically been considered "safe" investments and wade into the deeper end of the risk pool (to use a metaphor) to attain satisfactory income. Although this may create the near-term benefit of lower cost of capital for issuers, a resistance point will be reached. At what point will investors view rewarding a sovereign government to hold their money as a poor risk/reward proposition? After all, the duration risk on a 10-year bond is close to nine years; therefore, a 100-basis-point rise in yields would translate into a 9% principal loss.

Although we view sovereign rates as too low, we also do not expect a significant rise anytime soon. When the current trend of excessive risk-taking unwinds, the likely outcome will be a flight to quality — into sovereign debt and out of anything with risk. Despite today's low yields, this will keep a lid on rates until the excesses of monetary policy can be eradicated.

Other Costly Side-Effects

NIRP comes with other negative implications. First, the concept impairs bank profitability, thus hampering internal capital formation. Second, pension plans and insurance companies (two groups that depend on reasonable yields on bonds) will have their business models thrown into disarray. And third, NIRP encourages greater utilization of currency as opposed to deposit accounts when handling transactions; this effectively short-circuits the multiplier effect of modern banking. From a practical standpoint, NIRP is likely to be ineffective unless accompanied by robust fiscal spending, which happens to be very problematic for already deeply-indebted sovereigns.

Implications for Bond Portfolios

We believe the NIRP construct will translate to excessive and mispriced risk in the markets as well as an extended period of elevated volatility. This fits well with the Reams investment process, which is predicated on responding to market volatility. We foresee a market ripe with opportunities to add value in the fixed-income space. We expect to maintain a defensive posture in all managed portfolios, with substantial liquidity and flexibility to respond to market dislocations, whether in rates or at the sector level.■

CBIS' Conclusion

The prevalence of low to negative global yields certainly shapes investors' expectations for bond returns in the years immediately ahead. Very low coupons have extended duration of core bond benchmarks and made bond portfolios more volatile as a result. The returns produced over the past 30 years — as bond yields fell from a 1981 high of nearly 16% — are unlikely until and unless yields rise considerably from today's levels. That in turn will mean a temporary reduction in principal values as rates are rising. Bond investors will have to feel some pain on the long road to more attractive long-term returns; managing well through that pain will be essential to achieving success.

Yet even today's historically unprecedented low rates do not negate the rationale for bonds in a fully diversified portfolio. A bond allocation can still act as a risk reducer, offering a hedge against deflation and pronounced equity market weakness. Structuring a bond portfolio to provide risk reduction benefits is possible even with today's low yields. Moreover, yields in the U.S. could go lower still and near-term bond returns may continue to surprise with their strength (given its very long duration, the 20-year U.S. Treasury returned 20% in 2016). However, barring a return to recession or financial crisis, the odds favor rate increases rather than declines; investors who position bond allocations for stability and who avoid chasing yield by extending out the curve will likely achieve the best results.

CBIS addresses bond risks and opportunities through intelligent diversification of bond exposure and the use of skilled, veteran sub-advisers with a demonstrated ability to succeed in a variety of market environments. Our fixed-income funds allow investors to manage the interest rate sensitivity of a fully diversified portfolio, even in a global backdrop with less-than-zero yields.

- CUIT Money Market Fund
- CUIT Short Bond Fund
- CUIT Opportunistic Bond Fund
- CUIT Intermediate Diversified Bond Fund