

U.S. Rate Outlook: Base, Bear and Bull Cases

NORTH AMERICA

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- Morgan Stanley Wealth Management's Portfolio Strategy & Research Group (PSRG) is pleased to offer the fourth installment in its series of U.S. Rate Outlook reports.
- With spring upon us, fixed income investors have experienced a changing landscape as compared to how they entered into 2014. The overwhelming consensus for higher rates has given way to lower long-term UST yields and curve flattening. Fixed Income Strategy offers three different settings to consider: (1) the UST 10-yr yield remains relatively range-bound but seesaws to an elevated level; (2) rate hikes re-emerge and occur swifter and higher in magnitude; and (3) rates surprisingly move lower from here.
- Offered in this report are base, bear and bull cases for interest rates, and specific security recommendations to suit each of the above-captioned scenarios. The themes outlined in this report will be updated as market conditions dictate or on a quarterly basis at a minimum.
- Fixed Income Strategy believes dynamics can change swiftly within the money and bond markets, which could require a more flexible approach to fixed income investing. The strategists offer investors their latest macro fixed income outlook in an effort to help investors make investment decisions in various market settings.
- Exchange-Traded Fund (ETF) research provides coverage on over 300 US-listed ETFs. Specifically, the market for index-linked fixed income ETFs is \$259 billion, with 202 ETFs that provide a wide range of fixed income investment options. Fixed income ETFs can be used to implement the views of Fixed Income Strategy and can be an alternative or complement to investing in individual securities and other types of funds.

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US Rate Outlook

Kevin Flanagan

Fixed income investors are facing a different landscape as compared to our prior publication back in late January. The overwhelming consensus for higher rates has given way to lower UST long-term yields, accompanied by a visible flattening in the yield curve. Discussions about future Fed tapering plans have been replaced by a debate over when the first rate hike will occur. There are still no inflationary fears evident, but a key question for the rate outlook is whether the paltry +0.1% gain in Q1 real GDP was purely due to a difficult winter, and whether the economy will snap back into a +2% to +3% growth channel. As we go to press, the UST 10-yr yield resides at the lower end of our base case operating range, and awaits some clarity on the aforementioned factors.

Macro Scenarios

Base Case

Fixed Income Strategy continues to see a sawtooth pattern to higher yields for the UST 10-yr yield. We believe future rate trends will be dictated by domestic economic considerations. In our opinion, the weaker-than-expected showing for growth in Q1 was mostly weather related, and economic activity should improve going forward, in-line with MS & Co.'s forecast of +2.7% GDP for 2014. We expect inflation readings to remain relatively subdued, so the projected rise in the 10-yr yield can be capped out to some degree. Against this backdrop, Fixed Income Strategy's operating range for the UST 10-yr yield is expected to remain at its current setting of 2.50%-3.25%.

Bear Case

In this scenario, US economic growth rebounds more quickly and in greater magnitude than the market currently expects. New hiring picks up, leading to upward wage pressures. The Fed fails to manage the market's expectations regarding the first rate hike in the fed funds rate, pushing up the timing for such action, accordingly. Fixed Income Strategy's bear case scenario would put the 10-yr yield in the 3.25%-4.00% threshold.

Bull Case

In our opinion, this side of the trade seems the least likely, but the recent rally in the UST 10-yr bears watching. In this scenario, the economy fails to bounce back as the weather improves. In addition, global concerns stemming from EM, the Euro Zone and/or Ukraine begin to dominate the headlines. The bull case scenario places the UST 10-yr yield in the 1.75%-2.50% threshold.

ETF Implementation

Michael Jabara

The ETF research team believes ETFs offer an efficient way to access fixed income markets and to implement the views of Morgan Stanley Wealth Management's Fixed Income Strategists. ETFs trade similar to individual stocks, offer instant diversification, and exhibit low expense ratios relative to actively managed mutual funds. They are also generally tax efficient and most fixed income ETFs pay monthly distributions. The ETF team notes that there are other ETFs that focus on different areas of the fixed income market (i.e., credit, international debt, preferreds); however, for this report, the ETF team primarily targets US interest rate-focused ETFs that they currently cover.

Interest Rate Scenarios

Base Case

In the event interest rates gradually increase over the coming year, in conjunction with Morgan Stanley Wealth Management Fixed Income Strategists' views, the ETF team suggests shorter-duration investments. Within US Treasuries, the Fixed Income Strategists prefer maturities of three to five years. To implement the Strategists' base case interest rate scenario, the ETF team recommends the **iShares 3-7 Year Treasury Bond ETF (IEI; \$121.26)**. IEI tracks the Barclays US 3-7 Year Treasury Bond Index, which includes publicly issued, US Treasury securities that have remaining maturities between three and seven years, have \$250 million or more of outstanding face value, must be denominated in USD, and must be fixed rate and non-convertible. As of 5/7/14, IEI has a weighted-average maturity of 4.7 years, an effective duration of 4.5 years, and an approximate expense ratio of 0.15%. There are options available on IEI.

Bear Case

For investors who believe economic data will come in stronger than expected and rates on the long end of the Treasury curve will move significantly higher from here, there are select ETF options, in the ETF team's view. The **ProShares Short 20+ Year Treasury (TBF; \$29.36)** seeks daily investment results, before fees and expenses, that correspond to 1x inverse the daily performance of the Barclays US 20+ Year Treasury Bond Index. The Barclays US 20+ Year Treasury Bond Index includes publicly issued, US Treasury securities that have a remaining maturity of greater than or equal to 20 years, have \$250 million or more of outstanding face value, must be denominated in USD, and must be fixed rate and non-convertible. As of 3/31/14, the index has a weighted average maturity of 27.4 years and a modified duration of 17.8 years. Due to the effects of compounding of daily returns,

TBF's returns over periods longer than one day will likely differ in amount and possibly direction from the target return for the same period. Therefore, the ETF team views TBF as more of a trading vehicle rather than a buy and hold, and advises investors to actively monitor their positions, rebalancing* when necessary. TBF has an approximate expense ratio of 0.95%. There are options available on TBF.

Based on the limited options within a bear case scenario, we also highlight three credit-sensitive ETFs that should perform relatively better in a rising interest rate environment. The **iShares Floating Rate Bond ETF (FLOT; \$50.74)** is an investment grade floating rate ETF and the **PowerShares Senior Loan Portfolio (BKLN; \$24.84)** and **SPDR Blackstone/GSO Senior Loan ETF (SRLN; \$49.82)** are below investment grade floating rate ETFs.

FLOT provides investors exposure to US investment grade floating rate notes and tracks the Barclays US Floating Rate Note < 5 Years Index. The Barclays US Floating Rate Note < 5 Years Index includes debt instruments that pay a variable coupon rate, most of which are based on 3-month LIBOR, with a fixed spread. Securities in the index have a remaining maturity of greater than or equal to one month and less than five years, have \$300 million or more of outstanding face value, and must be denominated in USD. As of 5/7/14, FLOT has a weighted-average maturity of 2.1 years, an effective duration of 0.2 years, and an approximate expense ratio of 0.20%. Options are not available on FLOT.

BKLN provides investors exposure to below investment grade rated leveraged loans and tracks the S&P/LSTA US Leveraged Loan 100 Index. The S&P/LSTA US Leveraged Loan 100 Index includes the largest floating rate senior loans that have a minimum initial term of one year, a minimum initial spread of 125 bps over LIBOR, are USD denominated, and have a par amount outstanding of \$50 million or greater. BKLN has the ability to invest up to 20% of its portfolio in senior loan closed-end funds. As of 5/2/14, BKLN has an average maturity of 5.2 years, average days to reset on the loans of 51 days, and an approximate expense ratio of 0.65%. There are options available on BKLN.

SRLN is an actively managed ETF that provides investors exposure to below investment grade rated leveraged loans. SRLN is sub-advised by GSO/Blackstone and focuses on first lien loans that the sub-advisor believes are less volatile than the general loan market. The sub-advisor relies on fundamental credit analysis in an effort to minimize portfolio losses and each loan in the portfolio has a par amount outstanding of greater than \$250 million. As of 5/6/14, SRLN has an average days to reset on the loans of 79 days and an approximate expense ratio of 0.70%. Options are not available on SRLN.

There are ETFs providing exposure to US T-Bills; however, we purposely excluded them from this report given their lack of 30-day SEC yield.

Bull Case

Under a bull case scenario, whereby the yield on the 10-year US Treasury breaches 2.50%, the ETF team recommends investors take duration risk. The **iShares 20+ Year Treasury Bond ETF (TLT; \$112.08)** provides investors exposure to the long end of the Treasury curve. TLT tracks the Barclays US 20+ Year Treasury Bond Index, which includes publicly issued, US Treasury securities that have a remaining maturity of greater than or equal to 20 years, have \$250 million or more of outstanding face value, must be denominated in USD, and must be fixed rate and non-convertible. As of 5/7/14, TLT has a weighted-average maturity of 27.1 years, an effective duration of 16.7 years, and an approximate expense ratio of 0.15%. There are options available on TLT.

In the event rates move lower, investors may also want to consider the **iShares MBS ETF (MBB; \$107.40)** and the **iShares Agency Bond ETF (AGZ; \$112.15)**. While these ETFs may offer higher 30-day SEC yields relative to Treasury ETFs with comparable maturities, we note that MBB and AGZ have durations less than 5 years and will likely not be as responsive to interest rate changes as TLT.

MBB provides investors exposure to US agency mortgage-backed securities (MBS) and tracks the Barclays US MBS Index. The Barclays US MBS Index includes securities issued by GNMA, FHLMC, and FNMA that have maturities of 30-, 20-, 15-year, and balloon securities that have a remaining maturity of at least one year, are investment grade, have \$250 million or more of outstanding face value, must be denominated in USD, and must be fixed rate and non-convertible. As of 5/7/14, MBB has a weighted average maturity of 4.9 years, an effective duration of 4.4 years, and an approximate expense ratio of 0.27%. There are options available on MBB.

AGZ provides investors exposure to US agency issued bonds and tracks the Barclays US Agency Bond Index. The Barclays US Agency Bond Index includes securities issued by government and government-related agencies, including FNMA. The index contains both callable and non-callable agency securities, and to be included in the index, securities must have \$250 million or more of outstanding face value, must be denominated in USD, and must be fixed rate and non-convertible. As of 5/7/14, AGZ has a weighted average maturity of 4.5 years, an effective duration of 3.7 years, and an approximate expense ratio of 0.20%. Options are not available on AGZ.

Prices as of market close on 5/7/14.

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Fixed Income

Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which is the risk that the issuer will redeem the debt at its option, fully or partially, before the scheduled maturity date. The market value of debt instruments may fluctuate, and proceeds from sales prior to maturity may be more or less than the amount originally invested or the maturity value due to changes in market conditions or changes in the credit quality of the issuer. Bonds are subject to the credit risk of the issuer. This is the risk that the issuer might be unable to make interest and/or principal payments on a timely basis. Bonds are also subject to reinvestment risk, which is the risk that principal and/or interest payments from a given investment may be reinvested at a lower interest rate.

Bonds rated below investment grade may have speculative characteristics and present significant risks beyond those of other securities, including greater credit risk and price volatility in the secondary market. Investors should be careful to consider these risks alongside their individual circumstances, objectives and risk tolerance before investing in high yield bonds. High yield bonds should comprise only a limited portion of a balanced portfolio.

Principal is returned on a monthly basis over the life of a **mortgage-backed security**. Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. Yields and average lives are estimated based on prepayment assumptions and are subject to change based on actual prepayment of the mortgages in the underlying pools. The level of predictability of an MBS/CMO's average life, and its market price, depends on the type of MBS/CMO class purchased and interest rate movements. In general, as interest rates fall, prepayment speeds are likely to increase, thus shortening the MBS/CMO's average life and likely causing its market price to rise. Conversely, as interest rates rise, prepayment speeds are likely to decrease, thus lengthening average life and likely causing the MBS/CMO's market price to fall. Some MBS/CMOs may have "original issue discount" (OID). OID occurs if the MBS/CMO's original issue price is below its stated redemption price at maturity, and results in "imputed interest" that must be reported annually for tax purposes, resulting in a tax liability even though interest was not received. Investors are urged to consult their tax advisors for more information.

Duration, the most commonly used measure of bond risk, quantifies the effect of changes in interest rates on the price of a bond or bond portfolio. The longer the duration, the more sensitive the bond or portfolio would be to changes in interest rates. Generally, if interest rates rise, bond prices fall and vice versa. Longer-term bonds carry a longer or higher duration than shorter-term bonds; as such, they would be affected by changing interest rates for a greater period of time if interest rates were to increase. Consequently, the price of a long-term bond would drop significantly as compared to the price of a short-term bond.

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Closed-End Fund (CEF) Rating Category	CEF Coverage Universe		Investment Banking Clients (IBC)		
	Count	% of Total	Count	% of Total IBC	% of Rating Category
Overweight/Buy	30	30.6%	18	33.3%	60.0%
Equal-weight/Hold	46	47.0%	26	48.2%	56.5%
Underweight/Sell	22	22.4%	10	18.5%	45.5%
Total	98	100.0%	54	100.0%	

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