



Reassessing Risk—and Opportunity—in Short-Duration Fixed Income

Investors seeking attractive income in a yield-starved world—with lower risk—may wish to take a fresh look at short-maturity credit.

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IN BRIEF

- The low investment yields available over the past few years have created difficult tradeoffs for investors. But are there opportunities in established asset categories that might improve a portfolio's return profile without increasing overall risk?
- One option to consider is short-maturity credit, which historically has featured attractive yields and low price volatility.
- In this report, we will examine in detail five key attributes of short credit, and their influence on factors such as price volatility, return, credit ratings, and credit risk, across key short-maturity categories such as corporate debt, asset backed securities, and commercial mortgage-backed securities.
- The key takeaway: At a time when many investors are struggling to be adequately compensated for risks, short term credit may provide some real solutions.

Investors have been for some time now grappling with historically low expected returns across all asset classes. As central bank actions have left the global financial system awash in liquidity, yield-starved investors have squeezed value out of many traditional asset classes. While price appreciation of many assets has helped in recent years, investors have been left with a difficult trade-off: accepting lower returns or changing their traditional asset mix.

This difficult investment environment means investors are now taking more risk than they may be comfortable with, or are invested in assets with which they may have minimal familiarity. Fortunately, there are still some opportunities involving familiar assets that can improve a portfolio's return profile without increasing overall risk.

We believe that there is a persistently appealing, but often overlooked, source of attractive risk-adjusted returns in short-maturity credit that may address many of today's investment needs. Short credit's historically consistent characteristics of attractive yields and low price volatility make for a powerful combination that can help investors in any environment. Investors willing to put in the effort to source and scrutinize short-term fixed-income paper can still find generous yields without adding significant risk to the portfolios.

This paper will focus on five key attributes of short-maturity paper and their implications for investors:

- 1) The "pull to par" mitigates price volatility for short-term bonds.
- 2) Credit spreads over-compensate investors for short-term credit risk.
- 3) Investors should consider the performance/volatility trade-off.
- 4) Credit ratings may not provide an accurate view of actual investment risk.
- 5) The characteristics of short-term credit provide opportunities for active management.

1) THE "PULL TO PAR" MITIGATES PRICE VOLATILITY FOR SHORT-TERM BONDS.

This phrase refers to the fact that, unlike investment vehicles such as equities or real estate, we know the final end date of any fixed-income investment, and precisely what that investment will be worth when it matures. Every day that passes brings us closer to that final price; eventually, it becomes increasingly difficult

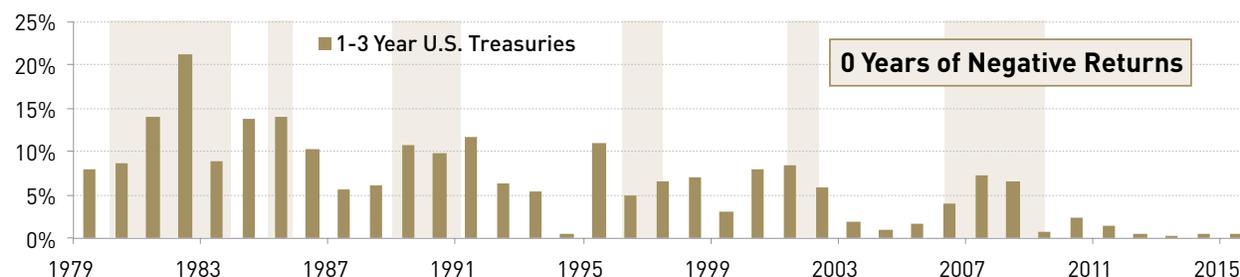
for the current price to differ materially from that final price, which is usually the value of the initial investment, or par. As a bond nears maturity, the potential price swings shrink, and this “pull” toward the final par price dominates market movements. This dampening effect on price volatility has resulted in very consistent, and very predictable, return streams for short-maturity fixed-income assets.

Though much has been made of the effect on the asset

class of potentially large interest-rate moves when central banks are active, the actual investment experience has not justified the fears. The price volatility of short-maturity bonds has always been less than the income generated. In fact, as Chart 1 shows, an investor who has simply invested in an index of short-term U.S. Treasury securities has never had a down year, even during periods when the U.S. Federal Reserve was raising interest rates (since inception of the index).

CHART 1. HOW LOWER-MATURITY TREASURIES HAVE PERFORMED DURING U.S. FEDERAL RESERVE RATE-HIKE INTERVALS

Calendar-year returns of short-term U.S. Treasury securities, 1979–2015



Source: Morningstar. Note: One- to three-year U.S. Treasuries are represented by the BofA Merrill Lynch 1-3 Year U.S. Treasury Index. Shaded areas represent periods during which the U.S. Federal Reserve raised interest rates.

Past performance is not a reliable indicator or guarantee of future results. Indexes are unmanaged, do not reflect the deduction of fees or expenses, and are not available for direct investment. Due to market volatility, the market may not perform in a similar manner in the future. Other time periods may have been different. The historical data are for illustrative purposes only and do not represent the performance of any portfolio managed by Lord Abbett or any particular investment.

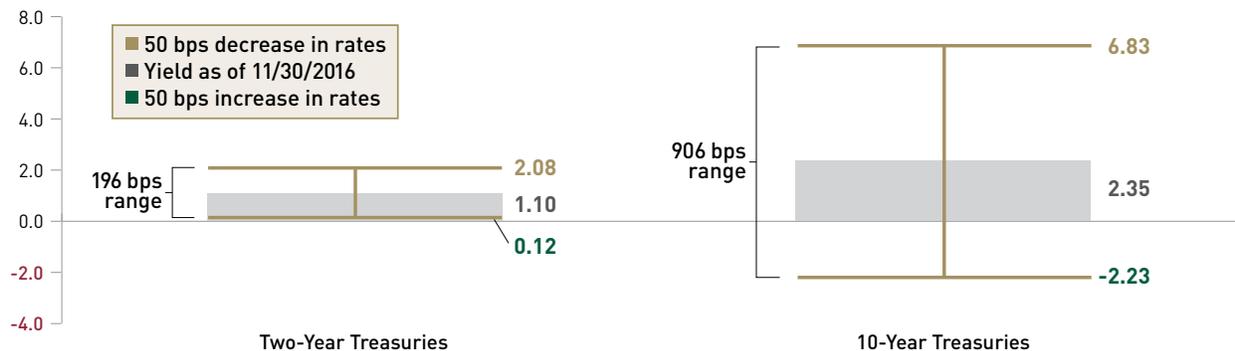
The consistently positive nature of this return stream has likely contributed to the widespread use of short-term U.S. Treasury securities as a perceived safe way to protect money and guarantee returns. However, the point here is not that short-term Treasury securities will always have positive returns (this may not always be the case), or even that short Treasuries are necessarily an attractive investment. Rather, the key insight is that the return profile of short-dated investments will be dominated by the starting yield—that is, the yield on the investment at purchase—with price movements of the bond itself only a second-order effect on the investment’s total return.

We can take this insight a step further. Since yield dominates returns when the maturity of the bond is relatively close, will higher yields then necessarily result

in higher returns? Over an appropriate time horizon, the answer is, yes. As long as an investor does not incur principal loss (a point we will discuss shortly), his or her return over the life of the bond will be the starting yield. Shorter maturities mean shorter time horizons for a bond to vary from its final price, and a shorter holding period to ensure a high level of certainty around total return. Investors will frequently discuss “duration,” or the sensitivity of a bond to changes in the “risk-free” rate. As we illustrate in Chart 2, lower duration means lower price volatility caused by interest rate moves for an investment. Less frequently discussed, but critical to the return of a fixed-income investment, is the yield of that investment. The higher the yield is on an investment relative to expected price moves, the more likely it is that returns will be positive over a given period of time.

CHART 2. TRACKING THE IMPACT OF PRICE VOLATILITY ON RETURN

Yield (actual) and hypothetical performance ranges based on interest rate swings of plus or minus 50 basis points for U.S. Treasury securities of indicated maturities, as of November 30, 2016



Source: Bloomberg and Lord Abbett. U.S. Treasury yields are as of November 30, 2016, and represented by Bloomberg Generic Government Yield Analysis for the two-year and 10-year notes. Performance ranges, based on projected total return under scenarios in which interest rates rise or fall by 50 basis points, were calculated by Lord Abbett and are hypothetical and for illustrative purposes only.

Past performance is not a reliable indicator or guarantee of future results. The graph does not represent any specific portfolio managed by Lord Abbett or any particular investment.

In the above example of two- and 10-year U.S. Treasuries, in which we examine total return across a 50 basis-point range, one can see that the range of outcomes is far greater for a 10-year bond than for a two-year note. As discussed above, the midpoint of those outcomes—the yield—is also important, and keeps the total return of the shorter bond positive even when interest rates have increased by 50 basis points (bps) in this example. This is because the ratio of that yield to the range of outcomes is 110 bps/196 bps, or 0.56. (By contrast, the 10-year Treasury note in the example has a far lower ratio: 235 bps/906 bps, or 0.26.) The higher the expected return, the more prices need to move for investors to experience a negative return. That ratio of expected return to price

uncertainty will be much higher with shorter-maturity bonds, and should encourage investors to examine yield versus volatility trade-offs.

A time series of short-term corporate bonds displays a similar relationship between low price movements and consistent returns. (See Chart 3.) Although credit-sensitive bonds can exhibit greater price movements, the extra yield spread of these bonds above Treasuries appears to more than compensate for the additional volatility. In the case of the one- to three-year corporate bond index depicted in Chart 3, it took an event as extreme as the 2008–09 financial crisis to generate an actual loss in a calendar year.

CHART 3. SHORT-TERM CORPORATE DEBT HAS SHOWN CONSISTENT POSITIVE ANNUAL RETURNS

Calendar year returns of U.S. short-term corporate debt, 1979–2015



Source: Morningstar. Note: One- to three-year U.S. corporates are represented by the BofA Merrill Lynch 1–3 Year Corporate Index. Shaded areas represent periods during which the U.S. Federal Reserve raised interest rates.

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2) CREDIT SPREADS OVER-COMPENSATE INVESTORS FOR SHORT-TERM CREDIT RISK.

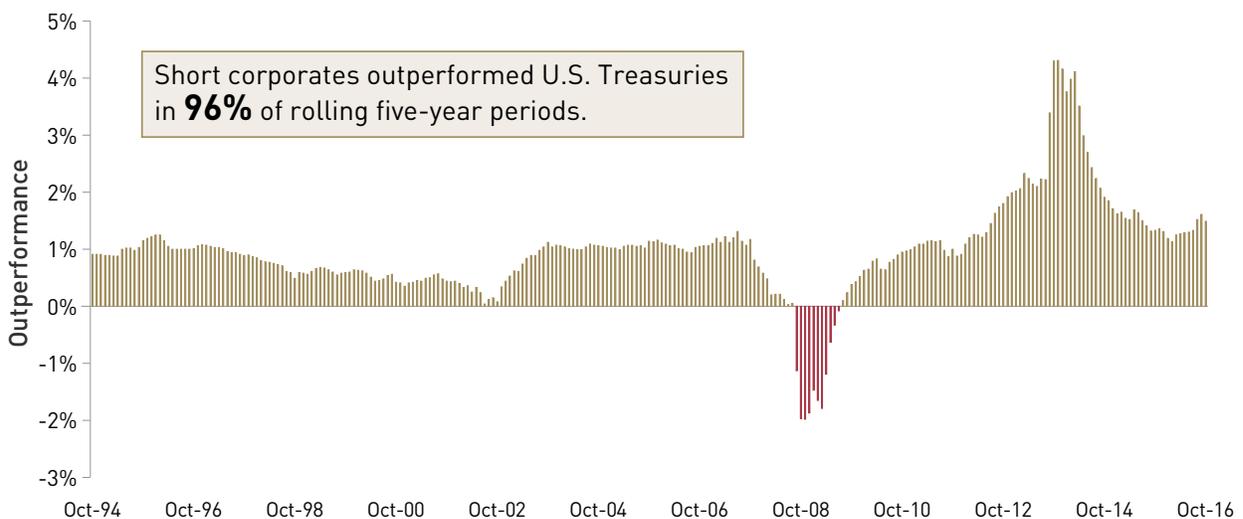
Further examination of the return profile of short-term corporate paper provides another noteworthy insight. Corporate bonds (as represented by the BofA Merrill Lynch 1–3 Year Corporate Index) more than recouped their 2008 losses in the following year. In fact, the total return over that two-year period was 5.65%, according to Bloomberg. As we discussed earlier, as long as there is no loss of principal—that is, the bonds pay investors in full at maturity—then investors ultimately will receive whatever yield they originally purchased.¹

So any assessment of the merits of short corporates versus Treasuries should consider whether extra yield compensates investors for potential default risk. One way to think about this is to observe relative performance of the entire asset class, since aggregate performance will capture all experienced defaults, in addition

to its characteristic higher yield versus Treasuries. Considering the excess returns (performance versus Treasuries) of short corporate paper shows us that, indeed, the incremental yield advantage of the asset class more than compensates for any experienced principal loss, across multiple credit ratings. Chart 4 shows that short credit has generated higher returns than short Treasuries over most periods, significantly more so on a cumulative basis. So not only is the absolute performance positive for the universe of short-maturity corporate paper, it also materially outperforms another asset class (short-term Treasuries) that have the same structural advantage of short-term predictability. In fact, this positive excess return over Treasuries, which factors every aspect of returns, including yield spread and defaults, holds true for many credit-sensitive asset classes, including structured-debt instruments such as asset-backed securities and commercial mortgage-backed securities (Charts 5–6).

CHART 4. SHORT-TERM INVESTMENT-GRADE CORPORATES HISTORICALLY HAVE OUTPERFORMED SIMILAR-MATURITY GOVERNMENT DEBT

Five-year rolling returns of one- to three-year corporate debt versus one- to three-year U.S. Treasuries, November 30, 1981–November 30, 2016



Source: Morningstar. Note: Chart data represent five-year rolling returns of the BofA Merrill Lynch 1–3 Year Corporate Index (inception date, January 1, 1976) versus the Bloomberg Barclays 1–3 Year Government Index. Beginning date for the rolling five-year return outperformance percentage is the inception date of corporate index. The chart shows from November 1981 for display purposes.

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CHARTS 5-6: SHORT-TERM STRUCTURED DEBT ALSO HAS OUTPERFORMED GOVERNMENT SECURITIES

CHART 5: COMMERCIAL MORTGAGE-BACKED SECURITIES (CMBS)

Five-year rolling returns of one- to three and a half-year CMBS versus one- to three-year U.S. Treasuries, November 30, 1981–November 30, 2016

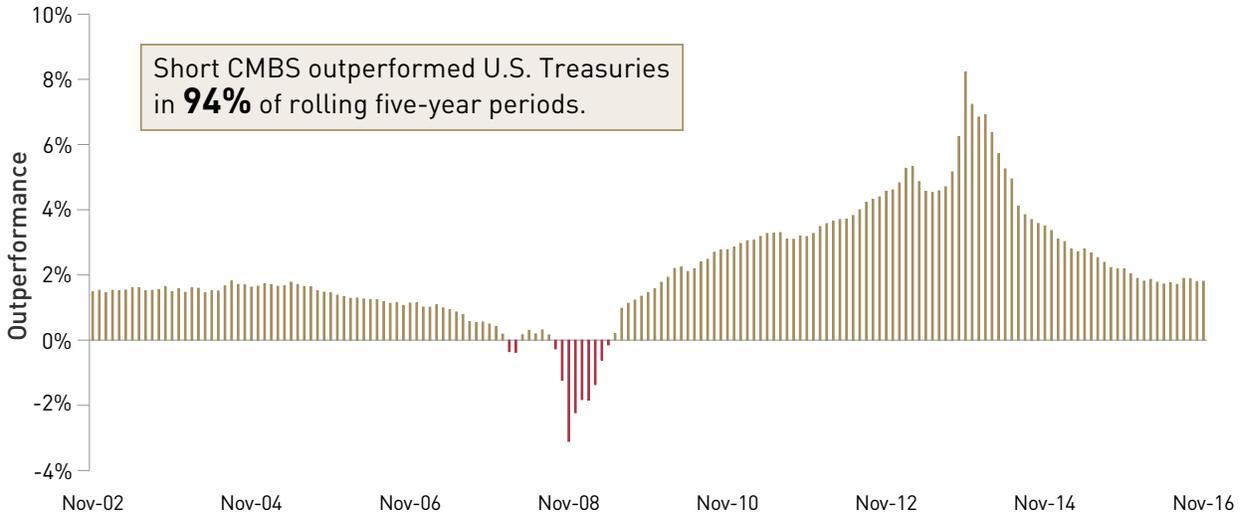
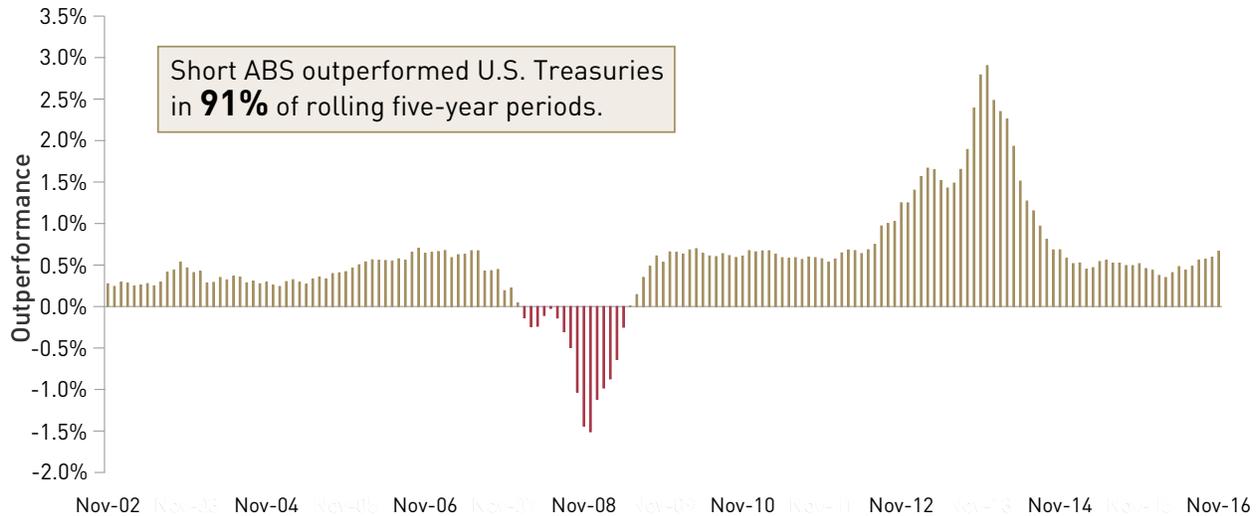


CHART 6: ASSET-BACKED SECURITIES (ABS)

Five-year rolling returns of zero to three-year ABS versus one- to three-year U.S. Treasuries, November 30, 2002–November 30, 2016



Source: Morningstar. Note: Chart 4: Five-year rolling returns of the Bloomberg Barclays 1-3.5 Year CMBS Index (CMBS index; inception date, January 1, 1997) versus the Bloomberg Barclays 1-3 Year Government Index. Beginning date for the rolling five-year return outperformance percentage is the inception date of the CMBS index. The chart shows from October 2002 for display purposes. Chart 5: Five-year rolling returns of the Bloomberg Barclays ABS 1-3 Year Index (ABS index; inception date, December 31, 1996) versus the Bloomberg Barclays 1-3 Year Government Index. Beginning date for the rolling five-year return outperformance percentage is the inception date of the ABS index. The chart shows from September 2002 for display purposes.

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3) INVESTORS SHOULD CONSIDER THE PERFORMANCE/VOLATILITY TRADE-OFF.

However, this apparent advantage for credit-sensitive, short-term assets merits further scrutiny. Can a broad asset class really maintain such a persistent return advantage in a supposedly efficient market? Or are there other trade-offs? Many investors also are concerned about the volatility of their investment returns, and this desire for increased predictability can be exaggerated in the universe of short-term assets, where many investors prioritize so-called “safe” investments.

Since credit-sensitive bonds can be more volatile than Treasuries, we also must explore whether the extra income is worth the additional volatility. Clearly, some investors who continue to invest in Treasuries don’t think it is. However, one commonly used statistic provides a useful way to consider this return versus volatility trade-off. Sharpe ratios measure an investment’s excess returns (above the risk-free rate) versus volatility. The higher the Sharpe ratio, the more an investment can be considered to compensate investors for volatility. Table 1 displays the Sharpe ratio of six fixed-income categories of varying maturities.

Unsurprisingly, then, the short-term asset categories listed in Table 1, which are characterized by lower volatility, feature substantially higher Sharpe ratios than both “safer” short-term Treasuries and longer-term credit with higher coupons. We believe this sweet spot of generous returns versus low volatility points once again to the compelling nature of short-term fixed-income assets in general, and particularly for short-dated credit. Defining risk as volatility, as many investors do, shows a clear advantage for short credit. But does the level of volatility of an investment really define how “safe” it is?

4) CREDIT RATINGS MAY NOT PROVIDE AN ACCURATE VIEW OF ACTUAL INVESTMENT RISK.

Of course, the return realized on any fixed-income asset is predicated on investors actually getting their money back. Short-term fixed-income strategies will have very predictable results, as long as investors don’t lose principal. Perhaps the uncertainty associated with credit risk explains the historical popularity of guaranteed return vehicles, such as money market funds (prior to the money-market reform measures introduced in October 2016), Treasury-only vehicles, or the widespread use of minimum credit ratings associated with many short-term investments.

TABLE 1. SHORT-TERM CORPORATE, MORTGAGE, AND ASSET-BACKED SECURITIES RECENTLY OFFERED ATTRACTIVE REWARD FOR RISK

Five-year return versus risk in short-term bonds and other asset classes, as of November 30, 2016

	FIVE YEARS THROUGH NOVEMBER 30, 2016		
	AVERAGE ANNUAL TOTAL RETURN (%)	STANDARD DEVIATION	SHARPE RATIO
Short-Term U.S. Corporate Bonds ¹	2.19	0.97	2.12
Short-Term U.S. Investment-Grade CMBS ²	2.40	1.16	1.95
Short-Term ABS ³	1.32	0.71	1.73
Short-Term U.S. High-Yield Corporate Bonds ⁴	6.56	3.43	1.89
Short-Term U.S. Government Bonds ⁵	0.60	0.64	0.76
U.S. High-Yield Bonds ⁶	7.53	5.57	1.32

Source: Morningstar.

¹BofA Merrill Lynch U.S. Corporate 1-3 Year Index. ²Bloomberg Barclays CMBS Investment Grade 1-3.5 Year Index. ³Bloomberg Barclays ABS 1-3 Year Index. ⁴Bloomberg Barclays U.S. 1-3 Year High Yield Bond Index. ⁵Bloomberg Barclays U.S. Government 1-3 Year Index. ⁶Bloomberg Barclays U.S. High Yield Index.

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There is now more than \$2.7 trillion held in U.S. money market assets, as of December 1, 2016, according to the Investment Company Institute, so it is apparent that the desire for “safety” is unmistakable. However, investor preference for the perceived safety of higher-rated bonds is very much at odds with the opportunity set and true risk of short-term credit.

What is that risk? Certainly, absent other effective measurements for risk, credit ratings can provide a useful barometer. Credit ratings from major rating agencies have become the industry standard for assessing this risk, and generally have been predictive of the risk of default. Lower-rated bonds default with higher frequency than higher-rated bonds. However, rating agencies are not infallible; the value proposition for many active managers of credit risk is their potential to more effectively assess true risk than the rating agencies.

Keys to analyzing default risk:

Short-term maturities

- Cash on balance sheet
- Revenue assumptions
- Debt service coverage
- Ability to refinance debt

Long-term maturities

- All of the short-term factors, with far less certainty
- Regulatory change
- Shifting competitive landscape
- Technological disruption

Yet market participants are only too aware that credit ratings are not always an appropriate indicator of true risk. The discrepancy between a rating and true risk becomes particularly pronounced when we consider short-maturity credit. Consider an extreme case of a ‘B’ rated issuer with several debt securities outstanding, one of which matures in less than a month, compared with newly issued 10-year debt from the same entity. Clearly, those shorter bonds have a different risk profile than newly issued bonds, yet for many investors, or for institutional plans with minimum credit rating requirements, the fact that both bonds hold a ‘B’ rating suggests they share a comparable risk profile.

In reality, however, credit ratings for short-term debt have less to do with default risk than with the characteristics of a company’s balance sheet when the debt was issued years earlier. The market broadly understands this difference in real default risk. Bonds soon to mature, with a high likelihood of full repayment, will trade with a lower yield and tighter spreads than longer-dated risk. But many policies and investment plans use those credit ratings to exclude purchase of securities with a particular credit rating, regardless of true risk.

This somewhat arbitrary exclusion of certain credit ratings from large pockets of investment capital leads to some inefficiencies. Less demand typically means lower prices, all else being equal. This phenomenon helps to explain some of the persistent value (as discussed earlier) to be found in short-term credit. Credit ratings simply fail to indicate true risk for short-term credit, yet many analytical tools will penalize or exclude lower-rated investments for the offense of having been lower-rated years earlier.

5) THE CHARACTERISTICS OF SHORT-TERM CREDIT PROVIDE OPPORTUNITIES FOR ACTIVE MANAGEMENT.

This disconnect does not occur because credit ratings are fundamentally inaccurate; rather, it occurs because the rating process is inefficient. Rating agencies simply cannot re-rate bonds in real time, the way the market assesses value in real time. So there is a disconnect between an efficiently functioning market that rationally prices risk and allocations of capital that depend on inconsistent re-ratings. Such disconnects drive the value proposition for active managers—monetizing inefficiencies in the market place.

But this effect is more pronounced for short-term credit than it is for long-term credit, for a couple of reasons. First, the myriad investment vehicles across the credit-rating spectrum for longer-term credit mean there is no outsized capital allocation mismatch that distorts value as dramatically as it does on the front end. Second, the credit-evaluation process for short-term credit has fewer variables to consider; a good credit analyst can have a much higher level of certainty for the credit standing of short-term issues. Thus, credit analysts can have a far higher level of confidence about the viability of short-term debt as compared to longer-term debt.

And yet, credit spreads for short-term debt are often comparable to far riskier long-term debt. We already have seen that even adjusted for defaults, short-term credit historically has outperformed U.S. Treasuries. But the predictability of short-term credit also lends itself particularly well to active management, in that experienced credit analysts can have a high level of confidence over solvency over short periods of time, and can frequently avoid potential defaults.

CONCLUSION

At a time when many investors are struggling to be adequately compensated for risks, short-term credit may provide some real solutions. The low price volatility of the bonds, the predictability of the cash flows, and the valuation opportunities presented by market inefficiencies provide a compelling solution for a range of portfolio needs. The asset class has the potential to provide investors stability with a high level of income as a starting point for portfolio construction, or simply help them get well compensated for taking more short-term risk than a money market investment would provide.

Investors should note that the short-term nature can make remaining invested in the asset class a labor-intensive undertaking, especially with regard to identifying and sourcing new opportunities. However, the potential upside is significant for an investor with sufficient resources to source and analyze those opportunities. The credit analysis and security selection expertise of some professional managers can make them ideally suited to the task. ■

¹A bond’s yield to maturity assumes that all coupon payments are reinvested at the yield to maturity.

IMPORTANT INFORMATION

A Note about Risk: The value of investments in fixed-income securities will change as interest rates fluctuate and in response to market movements. Generally, when interest rates rise, the prices of debt securities fall, and when interest rates fall, prices generally rise. Bonds may also be subject to other types of risk, such as call, credit, liquidity, interest-rate, and general market risks. High-yield securities, sometimes called junk bonds, carry increased risks of price volatility, illiquidity, and the possibility of default in the timely payment of interest and principal. Moreover, the specific collateral used to secure a loan may decline in value or become illiquid, which would adversely affect the loan's value. Longer-term debt securities are usually more sensitive to interest-rate changes; the longer the maturity of a security, the greater the effect a change in interest rates is likely to have on its price. Lower-rated bonds may be subject to greater risk than higher-rated bonds. No investing strategy can overcome all market volatility or guarantee future results. Statements concerning financial market trends are based on current market conditions, which will fluctuate. There is no guarantee that markets will perform in a similar manner under similar conditions in the future.

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This article may contain assumptions that are "forward-looking statements," which are based on certain assumptions of future events. Actual events are difficult to predict and may differ from those assumed. There can be no assurance that forward-looking statements will materialize or that actual returns or results will not be materially different from those described here.

A **basis point** is one one-hundredth of a percentage point.

Duration is the change in the value of a fixed-income security that will result from a 1% change in market interest rates. Generally, the larger a portfolio's duration, the greater the interest-rate risk or reward for underlying bond prices.

A **bond yield** is the amount of return an investor will realize on a bond. Though several types of bond yields can be calculated, nominal yield is the most common. This is calculated by dividing the amount of interest paid by the face value.

The **Sharpe ratio** was developed by Nobel laureate William F. Sharpe as a measure of risk-adjusted performance. It is calculated by taking an asset class's (or portfolio's) excess return above the risk-free rate and dividing it by the standard deviation of its returns. The greater the Sharpe ratio, the better the risk-adjusted performance has been.

The **BofA Merrill Lynch 0-3 Year U.S. Asset Backed Securities Index** is a subset of the BofA Merrill Lynch U.S. Asset Backed Securities Index including all securities with an average life less than 3 years.

The **BofA Merrill Lynch BBB-Rated 1-3 Year U.S. Corporate Index** is an unmanaged index comprised of U.S. dollar-denominated investment-grade corporate debt securities publicly issued in the U.S. domestic market with between one and three years remaining to final maturity.

The **BofA Merrill Lynch Government Master Index** is a market capitalization-weighted index including all U.S. Treasury notes and bonds, with maturities greater than or equal to one year and less than 10 years and a minimum outstanding of \$1 billion.

The **Bloomberg Barclays 1-3 Year Asset-Backed Securities Index** is a maturity-specific component of the Bloomberg Barclays Asset-Backed Securities (ABS) Index, the ABS component of the Bloomberg Barclays U.S. Aggregate Index.

The **Bloomberg Barclays U.S. Aggregate Bond Index** represents securities that are SEC-registered, taxable, and dollar denominated. The Index covers the U.S. investment-grade fixed-rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities. Total return comprises price appreciation/depreciation and income as a percentage of the original investment.

The **Bloomberg Barclays U.S. 1-3 Year Government Bond Index** is an unmanaged index that includes U.S. government Treasury and agency securities with maturities of 1 to 3 years.

The **Bloomberg Barclays U.S. 1-3.5 Year CMBS Investment Grade Index** measures the market of conduit and fusion CMBS deals with a minimum current deal size of \$300 million. The index includes bonds that are ERISA eligible under the underwriter's exemption.

The **Bloomberg Barclays U.S. 1-3 Year High Yield Bond Index** is the 3 Year (1-2.9999) component of the Barclays U.S. High Yield Bond Index. The Barclays U.S. High Yield Bond Index covers the universe of fixed rate, non-investment grade debt. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are included.

The **Bloomberg Barclays U.S. High Yield Index** covers the universe of fixed rate, non-investment grade debt. Eurobonds and debt issues from countries designated as emerging markets (sovereign rating of Baa1/BBB+/BBB+ and below using the middle of Moody's, S&P, and Fitch) are excluded, but Canadian and global bonds (SEC registered) of issuers in non-EMG countries are included. Original issue zeroes, step-up coupon structures, 144-As and pay-in-kind bonds (PIKs, as of October 1, 2009) are also included.

Indexes are unmanaged, do not reflect the deduction of fees or expenses, and are not available for direct investment.

The credit quality of the securities in a portfolio is assigned by a nationally recognized statistical rating organization (NRSRO) such as Standard & Poor's, Moody's, or Fitch, as an indication of an issuer's credit-worthiness. Ratings range from 'AAA' (highest) to 'D' (lowest). Bonds rated 'BBB' or above are considered investment grade. Credit ratings 'BB' and below are lower-rated securities. High yielding, non-investment-grade bonds involve higher risks than investment-grade bonds. Adverse conditions may affect the issuer's ability to pay interest and principal on these securities.

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