

# Where Credit Is Due

The Opportunity in “Alternative”  
Fixed Income

Blackstone

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### Summary

Historically the job of the bond allocation was to buffer investors from periodic swings in equities and to provide some modest income they could harvest and spend. But it’s a new world for bonds, with historically low yields and rates that may have nowhere to go but up. This paper reviews some of the questions bond investors are asking today (about the prospect of rising rates, higher inflation, and lower bond returns overall) and considers whether and how the fixed income allocation should evolve going forward. Specifically, we look at a category of fixed income that we define as “alternative credit” and examine its characteristics—and its potential appeal—for investors who are rethinking their fixed income allocation.

# Exploring “Alternative” Fixed Income

## A Tipping Point in Fixed Income?

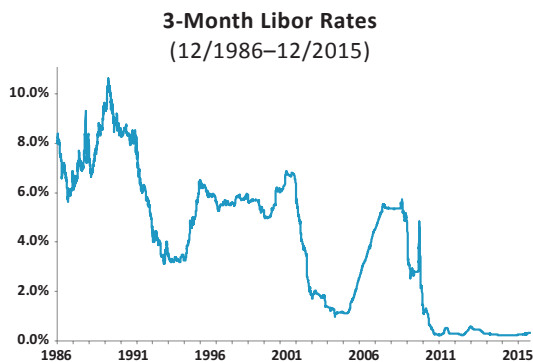
For many investors the fixed income component of their portfolio has led a generally quiet, untroubled existence. But in today’s uncertain environment, that is something that may change.

Let’s start with the known: interest rates in the developed world are at secular lows (*Display 1*). And while central bankers in the US, Japan, and Europe have publicly vowed to keep rates low as long as the post-crisis environment requires, it’s unlikely that the rise in rates can be forestalled forever. In fact, the protracted low-rate term structure over the last several years may even exacerbate the pace and scale of the rate rise when it does come.

Meanwhile, Treasury yields have declined over the long bond bull market stretch since 1981 to today, from over 15% to just over 2%, to the point where real, or inflation-adjusted, returns are barely in positive territory. Investors looking to harvest income to spend from their bond portfolio have had slim pickings at best (*Display 2*). In short, it seems the bull market in bonds has probably reached its end, and many have argued that a new chapter awaits for this important piece of the portfolio pie.

DISPLAY 1

### Rates Are Near Historic Lows



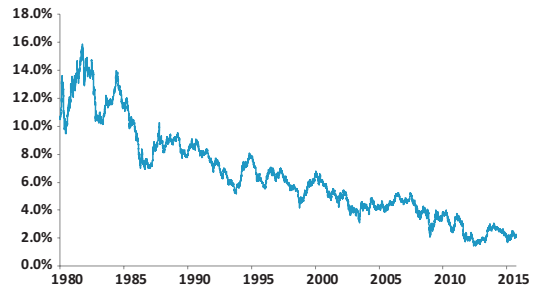
Source: Federal Reserve. Historic rates are no assurance of future rates.

Note: 1 Diversification does not assure a profit or protect against loss in declining markets

DISPLAY 2

### End of the 30-Year Bull Market in Bonds?

#### 10-Year Treasury Yields (1/1/1980–09/30/2015)



Source: Federal Reserve. Historic yields are no assurance of future yields.

## Where Credit Is Due

So what are some of the key questions fixed income investors are asking today, and what are the driving forces that will refashion the fixed income portfolio going forward? They tend to fall into several clear categories.

- **Yield:** It should be clear from headlines about the “search for yield” that one investment imperative is to generate more income from the bond portfolio—not an easy thing to do in an era of enforced low rates or “financial repression.”
- **Rising Rates and Inflation:** Another demand is to reduce the fixed income portfolio’s vulnerability to rising rates, and to inflation, that other enemy of bonds, which silently erodes the purchasing power of a fixed coupon payment.
- **Diversification:**<sup>1</sup> A complementary goal is simply to diversify the fixed income portfolio away from a more exclusive reliance on Treasuries, municipals, and investment grade corporates.
- **Opportunity:** Finally, bonds have played a particularly critical role during the last few years as the financial crisis and European debt issues have roiled stocks; now some investors are wondering what role bonds may have in the deleveraging cycle, and whether bonds may offer a way to capitalize on the unwind of European distress?

All of these concerns are inclining investors and their advisors to rethink the opportunity set in fixed income.

DISPLAY 3

### Investors Are Re-thinking the Fixed Income Opportunity Set



Note: For illustrative purposes only.

## Bonds Unbound

Many investors have long held a somewhat traditional allocation to fixed income, consisting primarily of Treasuries, Munis, and investment grade credit—essentially a core portfolio. Over the last decade or so, as global fixed income markets have grown and investing in categories like high yield and other “spread” product has become more common, we’ve seen investors expand their bond allocation beyond the core, to core “plus”—including emerging debt (EMD) and high yield bonds (*Display 3*).

But there’s another stage in the evolution of the fixed income portfolio, into what we are calling “Alternative Credit”—essentially a group of below-investment grade investment strategies that includes leveraged loans, commercial real estate debt, event-driven credit hedge funds, mezzanine, and distressed debt. These alternative strategies may also answer many of the questions fixed income investors are concerned about (regarding rates, yields, and

inflation), and may fit well into the type of bond portfolio they are considering for the future.

## Seeking an Alternative

The first point to make about “Alternative Credit” is that it’s not meant to replace, but to complement the traditional allocation to fixed income. Their corresponding characteristics present an interesting set of features and benefits (*Display 4*).

Where traditional fixed income generally works in more liquid, actively traded, efficient markets, alternative credit tends to focus more on less liquid, and thus less efficient areas of the bond market—where fund managers often deal directly with corporate management on a confidential basis to negotiate private covenant terms.

While traditional fixed income faces its greatest headwinds in environments of rising rates and higher inflation, alternative credit is often floating rate or has other characteristics that could mitigate its vulnerability to both rising rates and inflation.

DISPLAY 4

### Alternative Credit May Be an Attractive Complement to Traditional Fixed Income



Note: For illustrative purposes only.

And where traditional fixed income attempts to provide market-based returns from clearly identifiable indices, alternative credit largely involves unconstrained, benchmark-free pursuit of value based upon market-agnostic, company-specific credit events.

For these reasons, alternative credit generally operates in a different arena than traditional fixed income and can tap opportunities the traditional portfolio may otherwise miss.

### An Underexploited Opportunity?

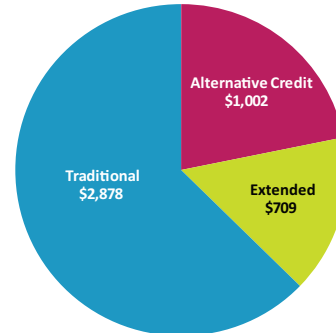
Investors can understand the complementary and under-exploited position of alternative credit in another way too—by looking at the amount of assets in the category, compared to both traditional and “extended” fixed income. By far the greatest allocation of individual investors’ fixed income assets, almost \$3 trillion, is concentrated in traditional fixed income vehicles (*Display 5*).

The “extended” fixed income category, which includes high yield, global bonds, and emerging market debt, has assets of over \$700 billion, a substantial amount given the limited capacity available in those strategies. Alternative credit, meanwhile, has about \$1 trillion spread across far more strategies, including non-traditional fixed income, long/short credit,

DISPLAY 5

### Investors Underexposed to Alternative Credit?

AUM by Fixed Income Segment  
(\$ in billions)



Note: Traditional includes all Morningstar Investment Grade Taxable Bond and Investment Grade Municipal categories (Mutual Funds & ETFs). Extended includes World, Emerging Market Debt, High Yield, Bank Loan and Convertibles. Alternative Credit includes Fixed Income, Distressed and Convertible Hedge Funds as well as Distressed Debt and Mezzanine private equity funds. Source: Morningstar Direct, BarclayHedge and Preqin. AUM as of 9/30/15.

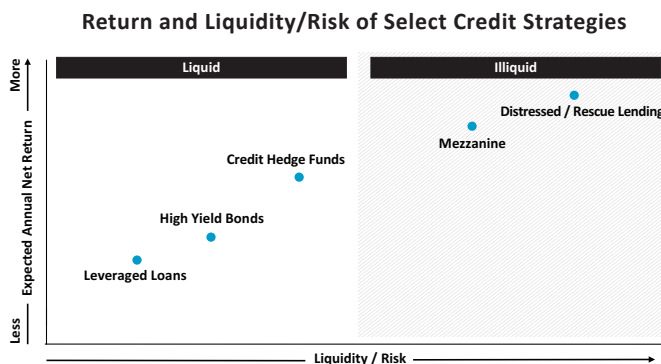
event-driven fixed income, mezzanine and distressed debt funds. But while there may be room for greater exposure to the alternative credit space, there are important impediments to greater allocations to this area, of which illiquidity may be one.

### The Illiquidity Premium

In Display 6 we’ve plotted an array of credit-oriented investments across a vertical expected annual return axis and a horizontal axis gauging liquidity/risk—not volatility, which is the typical complement to returns in graphs of this sort. For

DISPLAY 6

### Alternative Credit Can Provide Attractive Return Opportunities



Note: Blackstone estimates. For illustrative purposes only. There is no suggestion or assurance that these strategies are applicable to any Blackstone funds or the performance of any Blackstone funds. Portfolio composition and actual returns for Blackstone funds may vary substantially from the target illustrations described above. There can be no assurance that expected returns will be achieved or that a fund will be able to implement its investment strategy, achieve its investment objectives or avoid substantial losses.

example, credit hedge funds may offer investors access to their money quarterly or annually, while some mezzanine and distressed debt strategies are akin to private equity vehicles, with committed capital locked down for years. Though it's not a simple correlation, the lower the liquidity of these below-investment grade assets, the higher the expected return tends to be.

The potentially higher returns associated with less liquid strategies may be due to a number of reasons. One is that by providing financing to companies during periods of distress, when they may be orphaned by the capital markets, investors can demand a substantial premium over that available in traditional, liquid markets.

One important note: While the illiquidity of some alternative strategies does pose important challenges to investors, it doesn't necessarily mean increased risk as that term is often understood. In fact, typical measures of volatility, like standard deviation, would actually be lower in most illiquid strategies, as the pattern of their

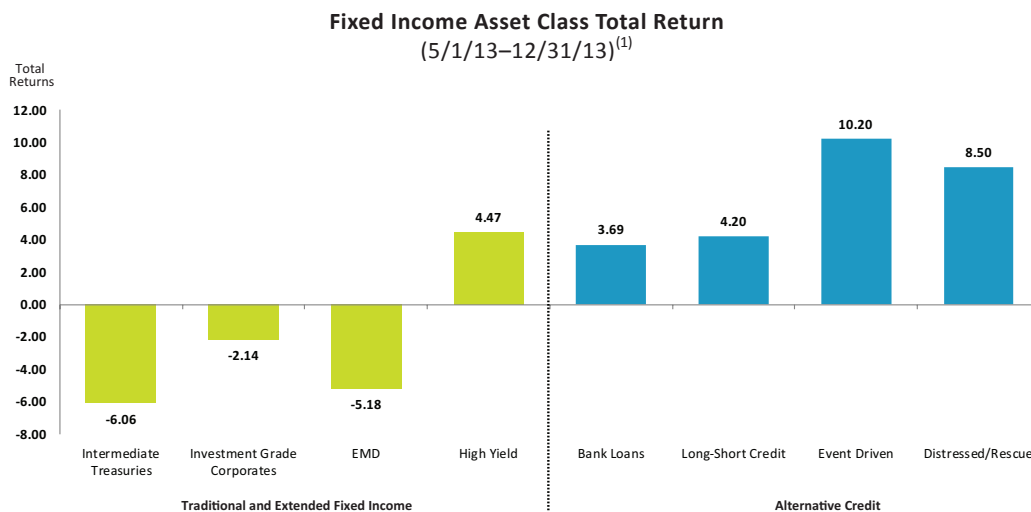
returns typically does not follow the gyrations of liquid markets. For example, in mezzanine and distressed strategies, yields are often based on the funds' own origination of the debt, and tend to be contractually fixed—they can't be altered or repaid for a specific period of time, providing predictability and stability to the returns. And there are other fixed income risks that alternative credit can help diversify away, like rising rates.

### Helping to Mitigate Interest Rate Risk

Reviewing the historical record shows that in periods of rising rates, the alternative credit category tends to perform better than the traditional cohort. Display 7 looks at the most recent spike in rates, from May 2013 through December 2013, when the ten-year Treasury increased by 135 basis points. The consequence of this rate rise across the traditional fixed income spectrum, including global or emerging debt, was negative returns for investors, particularly in sovereign bonds in the US and abroad.

DISPLAY 7

#### Alternative Credit Tends to Be Less Vulnerable to Interest Rate Risk



Note: (1) The 10-Year Treasury Increased By +135bps. Corresponding indices: Intermediary Treasuries/Citi US BIG Treasury 7-10 Yr, Inv Grade Corporates/Barclays US Corp 5-10 Yr TR, EMD/JPM EMBI Plus, High Yield/Credit Suisse HY, Bank Loans/Credit Suisse Leveraged Loan, Long-Short Credit/Greenwich Global HF Long/Short Credit, Event Driven/Credit Suisse Event Driven, Distressed-Rescue/HFRI Distressed. See "Notes and Disclaimers" section for description of such indices. Source: Morningstar Direct, HFRI. Past performance does not guarantee future results.

When we consider high yield and then look across at those strategies we identify as “alternative credit” we see a strong positive correlation with rising rates—resulting in about a 4% total return for bank loans and long-short credit in this period, and more than double that for event-driven and distressed funds. Now while this analysis looks at just the most recent rate rise, it is representative of the way these strategies behave in many of the prior periods of rate increases that we examined. We believe alternative credit strategies may help mitigate the damage an increase in rates will have on the fixed income portfolio.

### Less Vulnerable to Inflation

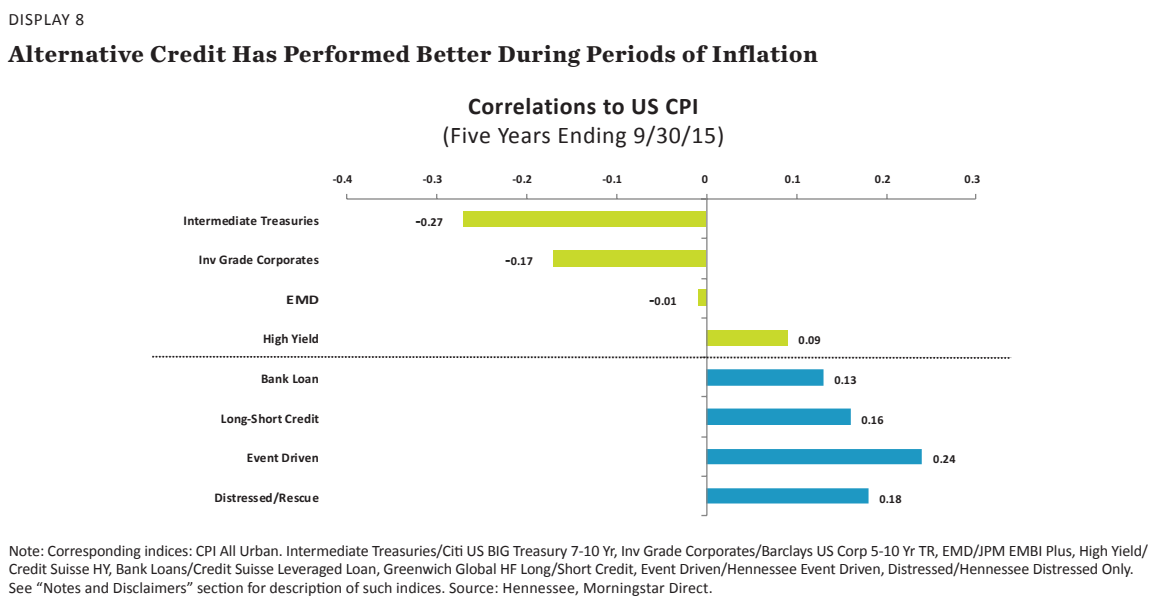
And the story is similar with inflation, which often goes hand in hand with spikes in rates. Display 8 looks at the behavior of different fixed income categories with respect to US Consumer Price Inflation (CPI), specifically the 5 year correlation between the strategy and US CPI. As with the prior display around interest rate risk, traditional fixed income categories (Treasuries and investment grade corporates) suffer during inflationary regimes, as the nominal value or purchasing power of their fixed coupon declines.

On the other hand, all of the alternative categories show a positive reaction to inflation—with correlations ranging from .13 to .24, as their return is often tied to drivers other than simply the nominal value of their coupon. In other words, the after-inflation value of their holdings will tend to go up when inflation rises. Again we see high yield as a sort of cross-over, possessing many of the characteristics of our “alternative” category of funds—in part because its returns are more tied to equity market movements. As a group, alternative credit strategies in general show behaviors that run counter to traditional fixed income, and that’s another reason they can be so attractive to investors: as portfolio diversifiers.

### Diversifying the Fixed Income Portfolio

Many traditional and extended fixed income categories move largely in tandem with the benchmark indices they are tethered to, which means they’re behaving just as the investor who bought them expected.

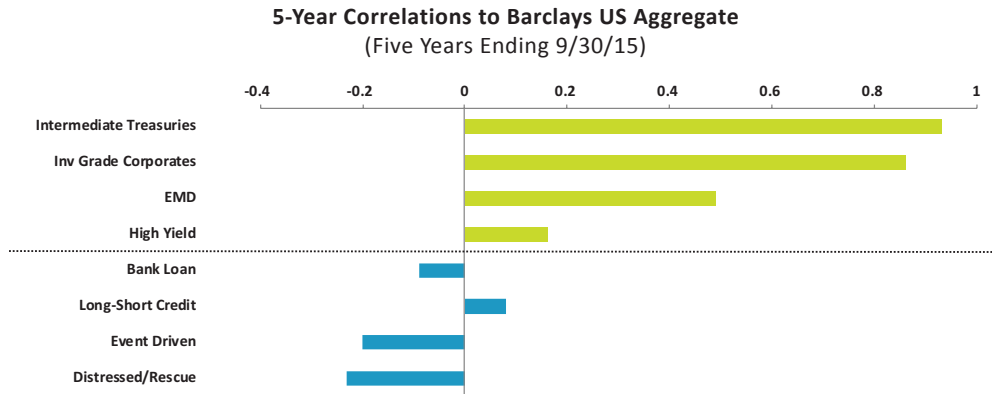
Alternative credit vehicles as a group tend to have very low or negative correlation to the major bond indices, for all the reasons stated earlier,





DISPLAY 9

**Alternative Credit Tends to Have Low Correlations to Traditional Fixed Income Categories**



Note: Corresponding indices: Intermediate Treasuries/Citi US BIG Treasury 7-10 Yr, Inv Grade Corporates/Barclays US Corp 5-10 Yr TR, EMD/JPM EMBI Plus, High Yield/Credit Suisse HY, Bank Loans/Credit Suisse Leveraged Loan, Greenwich Global HF Long/Short Credit, Event Driven/Hennessee Event Driven, Distressed/Hennessee Distressed Only. See "Notes and Disclaimers" section for description of such indices. Source: Hennessee, Morningstar Direct.

and therefore can help diversify the performance of a traditional fixed income portfolio—so they don't behave in a monolithic way when rates or the markets are moving against them (*Display 9*). In short, a strategic allocation to alternative credit may help reposition the total fixed income portfolio, to lessen its sensitivity to interest rates, inflation, and other traditional bond headwinds.

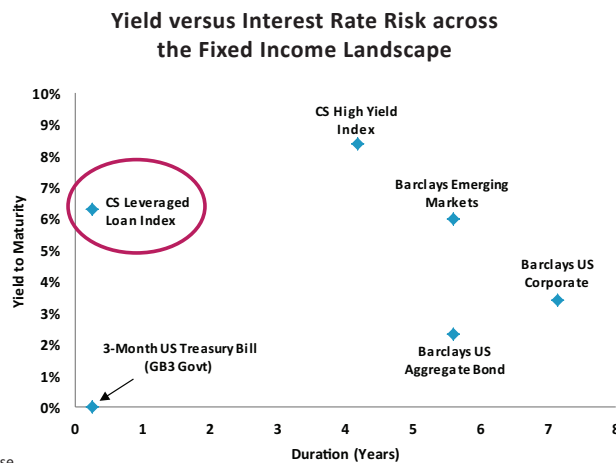
So let's take a look at specific alternative credit examples and see how they stack up. First, leveraged loans.

**The Opportunity in Leveraged Loans**

Leveraged loans, also known as "Senior" or "Floating Rate" loans, consist of debt extended to companies that are already carrying a large debt load. They tend to have higher interest rates, reflecting the higher level of risk involved in issuing them. *Display 10* shows the yield of the Credit Suisse Leveraged Loan and High Yield indices on the vertical axis and sensitivity to interest rates on the horizontal axis. What stands out at first glance are the strong and comparable yields

DISPLAY 10

**Leveraged Loans Offer High Yield, Low Duration**



Source: Barclays, US Treasury, Credit Suisse  
Notes: See "Notes and Disclaimers" section for description of such indices. Source: Bloomberg, Credit Suisse, Barclays. As of 9/30/15.

offered by both high yield and leveraged loans. But the difference in duration, or interest rate risk, between the two begs the question: why are you getting similar returns for different risk profiles?

Leveraged loans are generally floating rate and have a duration of about a quarter of a year—so they have far less negative sensitivity to rising interest rates. Furthermore, leveraged loans are more senior in the capital structure and may also be secured by assets of the borrower, so they have less credit risk as well.

Because senior loans are widely traded and available via closed and open-ended mutual funds, they may be considered to be within the familiar domain of most investors. So let's take one step further into the alternative space with another example: Event-driven, long/short credit hedge funds.

### **Event-driven Credit Strategies and Idiosyncratic Opportunities**

To understand the appeal of event-driven credit, you have to look closely at what we mean by the word “event.” The word can be loosely defined in various ways, but it almost always means one thing for an event-driven credit hedge fund: opportunity.

Here is why: a company could be facing a violation of its covenants, a near-term maturity that it can't meet, a difficult re-org or perhaps a regulatory ruling that creates substantial headwinds. Or the business could simply be facing a particularly severe downturn in a cyclical industry (*Display 11*).

Any one of these events could orphan the company: cause it such distress that it becomes particularly vulnerable to extreme negative outcomes, including bankruptcy, thus rendering it an unattractive risk to banks and other lenders. All of this sets the stage for a critical injection of capital—the provider of which can demand a particularly rich premium. Hence the term “event-driven” credit.

DISPLAY 11

#### **What Do We Mean by an Event?**

- **Covenant Violations**
- **Monetary Default**
- **Looming Debt Maturity**
- **Liquidity Problem**
- **Adverse Legal Ruling**
- **Secular Change**
- **Industry Cyclicity**
- **Corporate Re-Organization**
- **Spin-Offs**
- **Capital Structure Changes**
- **Regulatory Rulings**
- **Material Contract Maturities**

It's a small but important step from event-driven credit as we've defined it, which operates largely in the public credit markets, to the world of mezzanine and distressed debt, both of which require something we call “patient capital.”

### **The Private Market: Mezzanine and Distressed Debt Funds**

Just as an event-driven credit hedge fund can play off idiosyncratic company events, some dire milestone in its corporate history, mezzanine and distressed debt funds do the same, but amid the “private” market. Unlike public market bond funds, these types of strategies are akin to private equity drawdown funds: they are illiquid, typically with a four- or five-year investment period and a similar period of “harvest.” However, they tend to differ from private equity and other drawdown-type vehicles in that they often throw off current income over that entire period. And in addition

to their often substantial yield premiums versus traditional vehicles, total returns may be further augmented by origination fees on the debt they provide, and by call protections, which can generate additional potential premium in the form of pre-payment penalties.

But it is precisely their illiquidity” (the patient capital or “dry powder” that they hold and allocate in large amounts, but only when demand for it peaks) that may enable them to command higher premiums and better covenant terms. This constitutes a key potential advantage over more liquid, public bond categories: periods of increased volatility or market turbulence, while difficult for liquid strategies, can often present the most opportune investment environment for these illiquid funds, as corporate distress mounts and sets the stage for a “rescue” or some other liquidity solution.

The ability to step in with a capital “solution” just at the moment of crisis is a common practice for mezzanine and distressed debt funds—and it’s

becoming even more common. The opportunity for these funds has grown substantially in the current environment, with new regulation (including Basel III and the Volcker Rule) forcing many banks to increase their capital base and reduce the inventory of debt on their balance sheet, which in turn curbs their ability and desire to lend. Since the financial crisis, this primary source of funding to corporations has slowed considerably, particularly for smaller or middle market companies, whose need for additional underwriting has continued to rise, in part to refinance their maturing debt (*Display 12*).

In the past, there were few funds large enough to come in and solve a firm’s financing problem mid-crisis. In the absence of bank-driven lending, the competitive position of these larger funds has gotten even stronger. This is particularly true in Europe, where banks are lending less, borrowers face a wall of maturities, and the post-crisis deleveraging continues: private sources of liquid capital are in a rare position to take advantage of these dislocations.

DISPLAY 12

### Double Whammy: Rising Demand for Debt; Fewer Lenders

#### Dealer Inventories at Record Lows Primary Dealer Corporate Bond Positions



Source: Citigroup, as of 12/31/14.

### Where Credit is Due

The essential takeaway from this paper is that the fixed income portfolio is due for a review. We stand now likely at the end of a 30-year bull market in bonds: the question is what’s next, and what kind of bond portfolio will best serve the interests of investors over the next 30 years, and after. Whether they fear rising interest rates or inflation, or they need greater income and a more “modern” fixed income portfolio, advisors need to be prepared to answer their questions.

As alternative investments become increasingly mainstream, leveraged loans, event-driven credit, mezzanine and distressed debt portfolios will become more familiar, and appealing. As we’ve shown here, there are good reasons why this may be so.

## Glossary

**Alpha:** A measure of risk-adjusted performance which captures risk attributable to the specific security (or manager) rather than the overall market. A high alpha value implies that the investment has performed better than would have been expected relative to the overall market (beta). It is often called the “excess return” on an investment above a benchmark index or “risk free” rate of return.

**Alternative Investments:** Investment categories other than traditional securities or long-only stock and bond portfolios. This includes private equity, venture capital, real estate, hedge funds, and many illiquid investments.

**Beta:** The measure of sensitivity of a fund’s return to the return of an index. If the beta=1, then the return will move with that of the index. If the beta is  $> 1$ , the return is more volatile than the index, whereas if the beta is  $< 1$ , the return is less volatile than the index.

**Correlation:** A measure of how the returns of two or more assets perform in relation to one another. Assets with a correlation of 1.0 move in lock step. Those with a correlation of 0 have a random relationship to each other.

**Duration:** A measure of the sensitivity of the price (the value of principal) of a fixed-income investment to a change in interest rates. Duration is expressed as a number of years. Rising interest rates mean falling bond prices, while declining interest rates mean rising bond prices.

**Hedge:** An investment position intended to offset potential losses that may be incurred by a companion investment. A hedge can be constructed from many types of financial instruments, including stocks, exchange-traded funds, insurance, forward contracts, swaps, options, many types of over-the-counter and derivative products, and futures contracts.

**Leverage:** The use of financial instruments or borrowed capital to increase expected returns. Leverage can amplify a portfolio’s gains or losses.

**Sharpe Ratio:** Measures risk-adjusted return as a ratio of returns to risk. The Sharpe ratio (i) is used to express how much return is achieved for the amount of risk taken in an investment and (ii) is an effective way to compare hedge funds with similar return characteristics. When analyzing Sharpe ratios, the higher the ratio, the better. The Sharpe ratio formula is the fund return less the risk free return divided by the standard deviation of the hedge fund.

**Volatility (Standard Deviation):** Volatility measures how far returns stray from an average. The higher the standard deviation, the larger the difference among individual returns and the greater the financial risk. Volatility indicates the dispersion of the range of returns where low volatility means the returns are tightly clustered around the average return and higher volatility means the returns are dispersed at greater distances from the average.

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## Notes and Disclaimers

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Alternative investments can be highly illiquid, are speculative, and may not be suitable for all investors. Investing in alternative investments is only intended for experienced and sophisticated investors who are willing to bear the high economic risks associated with such an investment. Investors should carefully review and consider potential risks before investing. Certain of these risks may include:

- Loss of all or a substantial portion of the investment due to leverage, short-selling, or other speculative practices;
- Lack of liquidity in that there may be no secondary market for a fund;
- Volatility of returns;
- Restrictions on transferring interests in a fund;
- Potential lack of diversification and resulting higher risk due to concentration of trading authority when a single advisor is utilized;
- Absence of information regarding valuations and pricing;
- Complex tax structures and delays in tax reporting;
- Less regulation and higher fees than mutual funds; and
- Risks associated with the operations, personnel, and processes of the manager.

Prospective investors of any alternative investment should refer to the specific fund’s offering memorandum and operative documents, which will fully describe the specific risks and considerations associated with a specific alternative investment.

## Fixed Income Risks

Although bonds generally present less short-term risk and volatility than stocks, the bond market is volatile. Bonds entail interest rate risk (as interest rates rise, bond prices usually fall, and vice versa). This effect is usually more pronounced for longer-term securities. Bonds are subject to issuer credit risk, and the risk of default, or the risk that an issuer will be unable to make income or principal payments. Additionally, shorter-term bond investments typically have greater inflation risk, or the risk that the return of an investment will not keep up with increases in the prices of goods and services, than stocks. Lower-quality debt securities that generally offer higher yields, involve greater risk of default or price changes due to potential changes in the credit quality of the issuer. Funds that invest in government securities are not guaranteed. Mortgage-backed securities are subject to prepayment risk.

## Glossary of Indices

These indices referenced herein are used for comparisons purposes only. Indices are unmanaged and investors cannot directly invest in them. Any composite index results are shown for illustrative purposes and do not represent the performance of a specific investment.

**Barclays Capital US Aggregate Bond Index** is a composite of four major subindices: US Government Index; US Credit Index; US Mortgage Backed Securities Index (1986); and (beginning in 1992) US Asset Backed Securities Index. The index holds investment quality bonds. The ratings are based on S&P, Moody, and Fitch bond ratings.

**Barclays Capital US Aggregate Corporate Bond Index (Corporate Bond)** represents securities that are SEC-registered, taxable, and dollar-denominated. The index covers the US investment-grade fixed-rate bond market, with index components for government and corporate securities, mortgage pass-through securities, and asset-backed securities.

**Barclays Capital Emerging Markets Index** represents an unmanaged index that tracks total returns for external-currency-denominated debt instruments of the emerging markets.

**Barclays US Corp 5-10 Year TR Index** includes USD-denominated, investment-grade, fixed-rate, taxable securities issued by industrial, utility, and financial companies, with maturities between 5 and 10 years.

**Barclays US High Yield Bond Index (US High Yield)** covers the USD-denominated, non-investment grade, fixed-rate, taxable corporate bond market. Securities are classified as high-yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below.

**Citi US BIG Treasury 7-10 Yr Index** tracks the performance of US Treasury securities of at least \$5 billion public float outstanding with maturities between 7 and 10 years.

**CPI All Urban** is a measure that examines the changes in the price of a basket of goods and services purchased by urban consumers. The urban consumer population is deemed by many as a better representative measure of the general public because most of the country's population lives in highly populated areas, which represent close to 90% of the total population.

**Credit Suisse (CS) Leveraged Loan Index** is an unmanaged market value-weighted index designed to mirror the investable universe of the USD-denominated leveraged loan market. New issues are added to the index on their effective date if they qualify according to the following criteria: loan facilities must be rated "BB" or lower; only fully funded term loan facilities are included; and issuers must be domiciled in developed countries.

**Credit Suisse (CS) High Yield Index** is an unmanaged market value-weighted index designed to mirror the investable universe of the USD-denominated high yield debt market. New issues are added to the index upon issuance if they qualify according to the following criteria: issues must be publicly registered in the United States or issued under Rule 144A with registration rights; issues must be rated "BB" or lower; the minimum amount outstanding is \$75 million; and issues must be USD-denominated straight corporate debt, including cash-pay, zero-coupon, stepped-rate and pay-in-kind (PIK) bonds. Floating-rate and convertible bonds and preferred stock are not included; if an issuer has more than two issues outstanding, only the two most liquid issues are included in the index.

**Greenwich Global Long/Short Credit** tracks the performance of approximately 1,000 hedge funds that invest primarily in yield-producing securities with a focus on current income. Index returns are equal weighted averages and computed monthly.

**The Hennessee Event Driven Index** tracks hedge funds that focus on merger arbitrage, distressed, liquidations, and spin-offs in addition to value-driven special situation equity investing. Investments are usually dependent on an "event" as the catalyst to release the position's intrinsic value.

**The Hennessee Distressed Index** tracks funds whose primary investment focus involves securities of companies that have declared bankruptcy and/or may be undergoing reorganization. Investment holdings range from senior secured debt (uppermost tier of a company's capital structure) to the common stock of the company (lower tier of the capital structure).

**JPMorgan Emerging Markets Bond Index Plus (EMD/JPM EMBI Plus)** The JPMorgan Emerging Markets Bond Index Plus is a market capitalization weighted total return index of USD and other external currency denominated Brady bonds, loans, Eurobonds, and local market debt instruments traded in emerging markets.



