Credit as a Core Complement

Balancing Bonds and Equities in a High Yield Environment

Ken Shinoda, CFA & Robert Cohen, CFA | December 2024

With interest rates resetting higher over the last two years, today's corporate and securitized credit markets offer attractive yields for investors, ranging from over 5% for investment grade (IG) bonds to high-single- and low-double-digit yields for below-IG securities. *(Figure 1)* There is a compelling case for adding credit in client portfolios as both a complement to traditional core bonds and as a competitive investment to equities given current valuations.

Fixed Income Yields | As of November 29, 2024

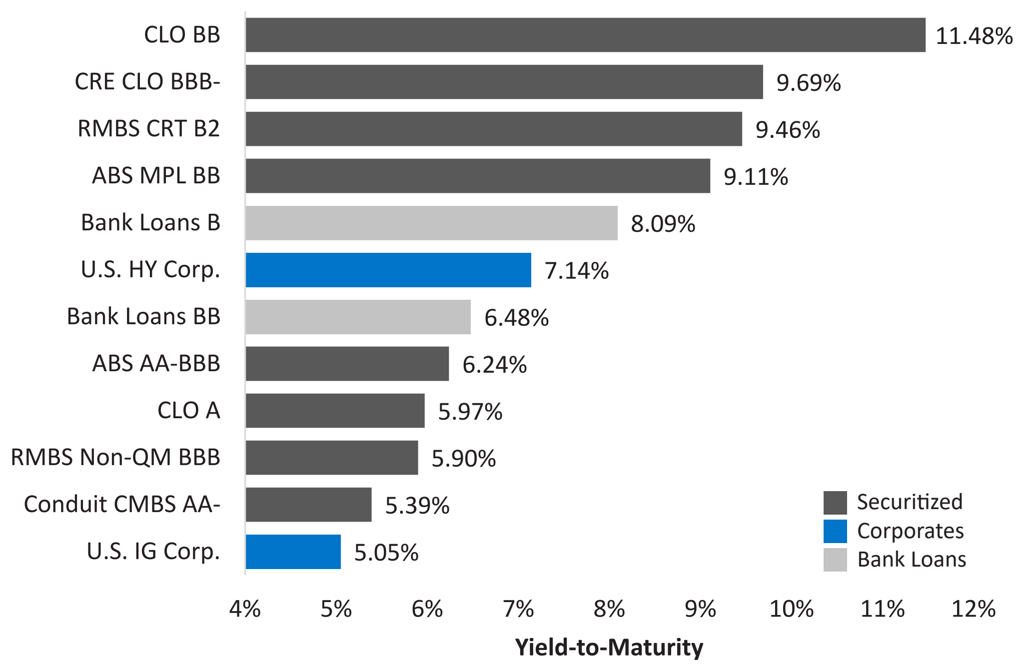


Figure 1
Source: DoubleLine, Bloomberg, BofA Global Research, J.P. Morgan
Marketplace Lending (MPL); Commercial Real Estate (CRE); Residential Mortgage-Backed Securities (RMBS). DoubleLine views YTM as a characteristic of a portfolio of holdings often used, along with other risk measures such as duration and spread, to determine the relative attractiveness of an investment. Please see Important Information Regarding This Material at the end of this article.

We believe an active and diversified approach to credit offers the most opportunities for investors and has the potential to generate better risk-adjusted returns than passive and single-asset products. Multisector credit has the potential to provide a high-single-digit total return and potentially generate 6% to 7% in current income. Further, we believe a credit-focused approach that achieves returns primarily through credit spread exposure rather than relying on duration positioning can be advantageous, particularly in an environment with higher-than-average interest-rate uncertainty.

A diversified credit approach has generated a superior Sharpe ratio relative to most single-asset indices through time. *(Figure 2)* We believe an active approach can potentially increase risk-adjusted returns by allocating across credit markets. Credit sectors often offer different spread levels, driven largely by the prevailing economic environment, which provides the opportunity for active management to allocate to sectors that offer relative value and underweight sectors that could potentially underperform.

Index	Return	Standard Deviation	Sharpe Ratio
Amherst Non-Agency Mortgage Index	7.55%	5.18%	1.20
ICE BofA BBB U.S. Fixed Rate CMBS Index	5.11%	7.45%	0.51
ICE BofA AA-BBB U.S. Fixed-Rate ABS Index	3.42%	3.76%	0.56
J.P. Morgan CLO BBB Index	8.00%	8.94%	0.75
Morningstar LSTA US Leveraged Loan Index	5.14%	4.91%	0.78
Bloomberg Ba US High Yield Index	5.99%	6.59%	0.71
Bloomberg US Corporate HY Index	6.02%	7.03%	0.67
Market-Value-Weighted Blend	**5.93%**	**5.38%**	**0.86**

Figure 2
Source: DoubleLine, Zephyr Style Advisor
Market-Value-Weighted Blend Portfolio rebalanced and calculated monthly, Jan. 31, 2012, to Sept. 30, 2024. Market-Value-Weighted Blend: Amherst Non-Agency Mortgage Index: 10.98%, ICE BofA BBB U.S. Fixed-Rate CMBS Index: 11.77%, ICE BofA AA-BBB U.S. Fixed-Rate ABS Index: 13.47%, J.P. Morgan CLO BBB Index: 18.14%, Morningstar LSTA US Leveraged Loan Index: 23.59%, Bloomberg Ba US High Yield Index: 22.05%; Total Portfolio = 100.00%. Based on market value outstanding as of Oct. 31, 2024. Start date of January 2012 due to inception of J.P. Morgan CLO BBB Index.

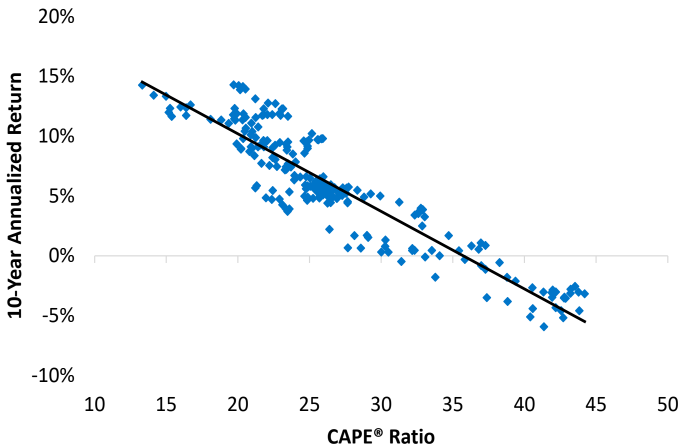
Implementing a diversified credit approach to existing core bond portfolios can improve risk-adjusted returns. To show this, we look at various weightings of diversified credit paired with the Bloomberg US Aggregate Bond Index to demonstrate how the inclusion of a diversified credit portfolio would have improved returns through time. *(Figure 3)* Additionally, when compared strictly to U.S. high yield (HY) corporate bonds, a diversified credit approach would have provided a similar return with less volatility and better drawdown.

January 2012 through September 2024	Return	Standard Deviation	Sharpe Ratio	Maximum Drawdown
Market-Value-Weighted Diversified Credit Portfolio	**5.93%**	**5.38%**	**0.86**	**-13.82%**
20% Diversified Credit Portfolio/80% Bloomberg US Aggregate Bond Index	2.89%	4.06%	0.39	-14.32%
30% Diversified Credit Portfolio/70% Bloomberg US Aggregate Bond Index	3.33%	4.00%	0.50	-13.31%
40% Diversified Credit Portfolio / 60% Bloomberg US Aggregate Bond Index	3.75%	4.03%	0.60	-12.41%
Bloomberg US Aggregate Bond Index	1.93%	4.54%	0.13	-17.18%
Bloomberg US Corporate HY Index	*6.02%*	*7.03%*	*0.67*	*-14.74%*

Figure 3
Source: DoubleLine, Zephyr Style Advisor
Diversified Credit Portfolio rebalanced and calculated monthly. Jan. 31, 2012, to Sept. 30, 2024. Market-Value-Weighted Blend: Amherst Non-Agency Mortgage Index: 10.98%, ICE BofA BBB U.S. Fixed-Rate CMBS Index: 11.77%, ICE BofA AA-BBB U.S. Fixed-Rate ABS Index: 13.47%, J.P. Morgan CLO BBB Index: 18.14%, Morningstar LSTA US Leveraged Loan Index: 23.59%, Bloomberg Ba US High Yield Index: 22.05%; Total Portfolio = 100.00%. Based on market value outstanding as of Oct. 31, 2024. Start date of January 2012 due to inception of J.P. Morgan CLO BBB Index.

On a cyclically adjusted price-to-earnings (CAPE®) Ratio basis, U.S. equity valuations are high. When equity market valuations are high, it is important to reassess expected returns from equity portfolios. The CAPE® Ratio was 38.13 at the end of November, which is in the 92nd percentile in terms of richness going back 30 years. *(Figure 4)* Annualized real returns for the S&P 500 Index from CAPE Ratios of 36 or higher have typically been associated with subdued to negative forward 10-year annualized returns.

S&P 500 10-Year Forward Annualized Real Returns vs. CAPE® Ratio | As of November 29, 2024



November 1994 - November 2024	Minimum	Maximum
CAPE® Quartile 1	13.32	23.95
CAPE® Quartile 2	24.00	26.79
CAPE® Quartile 3	26.79	31.26
CAPE® Quartile 4	31.28	44.20
Current CAPE®	**38.13**	
Current CAPE® % Ranking	92%	

Figure 4
Source: DoubleLine

The S&P 500 was generating an earnings yield of 3.70% as of Nov. 29, and when including dividends, the all-in yield increased to 5.02%. This provided a small risk premium to U.S. Treasury yields, which were 4.46% as of Nov. 29. *(Figure 5)*

S&P 500 Earnings Yield vs. 10-Year Treasury Yield
As of November 29, 2024

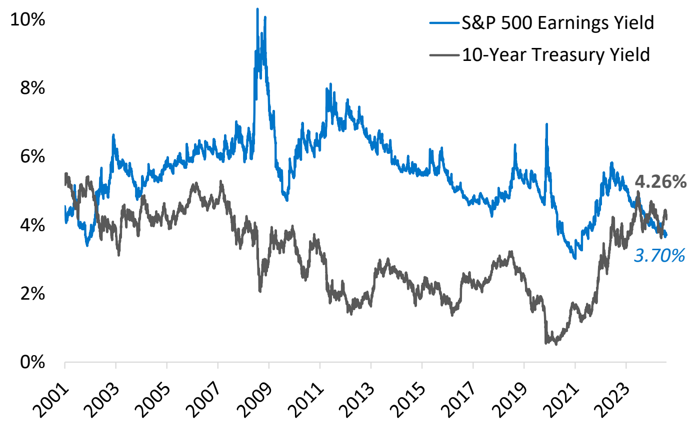


Figure 5
Source: DoubleLine, Bloomberg

While Treasuries look attractive relative to equities, credit markets present a more compelling yield scenario. A diversified credit portfolio can potentially offer a high single digit yield, which is comparable to the long-run average return of equities.[1] And given the current interest-rate environment, this high-single-digit yield could be achieved without taking on substantial credit risk. Therefore, not only does a diversified credit approach have the potential to provide total returns that are competitive with equities, but it does so with much less risk while providing a high level of current income. This makes credit a viable alternative for investors seeking better returns without taking on the higher risks associated with equity investments. ■

[1] MSCI ACWI returns from November 30, 1994, to November 29, 2024: 8.34% annualized.

Amherst Non-Agency Mortgage Index – This index, updated monthly by Amherst, tracks the performance of non-Agency mortgages.

Asset-Backed Securities (ABS) – Investment securities, such as bond or notes, that are collateralized by a pool of assets, such as loans, leases, credit card debt, royalties or receivables.

Below Investment Grade (IG)/Non-Investment Grade (Non-IG) – Term indicating a security is rated below investment grade (IG). These securities are seen as having higher default risk or being prone to other adverse credit events. They typically pay higher yields than higher-quality bonds in order to make them attractive. They are less likely than IG bonds to pay back 100 cents on the dollar.

Bloomberg Ba US High Yield (HY) Index – This index measures the performance of U.S. dollar-denominated, HY, fixed-rate corporate bonds rated Ba.

Bloomberg US Aggregate Bond Index – This index (the "Agg") represents securities that are SEC registered, taxable and U.S. dollar denominated. It covers the U.S. investment grade, fixed-rate bond market, with components for government and corporate securities, mortgage pass-through securities and asset-backed securities. These major sectors are subdivided into more specific indices that are calculated and reported on a regular basis.

Bloomberg US Corporate High Yield (HY) Index – This index measures the U.S. dollar-denominated, HY, fixed-rate corporate bond market. Securities are classified as HY if the respective middle ratings of Moody's, Fitch and S&P are Ba1, BB+ or BB+ or below. The Bloomberg US HY Long Bond Index, including bonds with maturities of 10 years or greater, and the Bloomberg US HY Intermediate Bond Index, including bonds with maturities of 1 to 9.999 years, are subindices of the Bloomberg US Corporate HY Index.

Collateralized Loan Obligation (CLO) – Single security backed by a pool of debt.

Conduit Loans – Type of loans, also known as commercial mortgage-backed securities (CMBS) loans, that are commercial real estate loans pooled together with similar commercial mortgages and sold on the secondary market. On the secondary market, conduit loans are divided into tranches based on risk, return and loan maturity.

Credit Distribution – Determined from the highest available credit rating from any Nationally Recognized Statistical Rating Agency ("NRSRO", generally S&P, Moody's and Fitch). DoubleLine chooses to display credit ratings using S&P's rating convention, although the rating itself might be sourced from another NRSRO. In limited situations when the rating agency has not issued a formal rating, the rating agency will classify the security as unrated.

Credit Risk Transfer (CRT) – Pioneered by Freddie Mac in 2013, CRT programs structure mortgage credit risk into securities and (re)insurance offerings, transferring credit risk exposure from U.S. taxpayers to private capital.

Cyclically Adjusted Price-to-Earnings (CAPE®) Ratio – This ratio measures valuation by using real earnings per share (EPS) over a 10-year period to smooth out fluctuations in corporate profits that occur during different periods of a business cycle. It is also known as the "Shiller P/E ratio" for Yale University Dr. Robert Shiller, who popularized its use.

Duration – A commonly used measure of the potential volatility of the price of debt securities in response to a change in interest rates prior to maturity. Securities with longer duration generally have more volatile prices than securities of comparable quality with shorter duration.

High Yield (HY) – Bonds that pay higher interest rates because they have lower credit ratings than investment grade (IG) bonds. HY bonds are more likely to default, so they must pay a higher yield than IG bonds to compensate investors.

ICE BofA AA-BBB U.S. Fixed-Rate Asset-Backed Securities (ABS) Index – This index tracks the performance of U.S. dollar-denominated, investment grade (IG) ABS rated AA to BBB publicly issued in the U.S. domestic market. Qualifying securities must have an IG rating based on an average of Moody's, S&P and Fitch.

ICE BofA BBB U.S. Fixed-Rate Commercial Mortgage-Backed Securities (CMBS) Index – This index tracks the performance of U.S. dollar-denominated, investment grade (IG), fixed-rate commercial mortgage-backed securities (CMBS) rated BBB and publicly issued in the U.S. domestic market. Qualifying securities must have an IG rating (based on an average of Moody's, S&P and Fitch), a fixed coupon schedule, at least one year remaining to final maturity and at least one month to last expected cash flow.

Investment Grade (IG) – Rating that signifies a municipal or corporate bond presents a relatively low risk of default. Bonds below this designation are considered to have a high risk of default and are commonly referred to as high yield (HY) or "junk bonds." The higher the bond rating the more likely the bond will return 100 cents on the U.S. dollar.

J.P. Morgan Collateralized Loan Obligation (CLO) BBB Index (CLOIE) – This market value-weighted index comprises U.S. dollar-denominated CLOs rated BBB.

Morningstar LSTA US Leveraged Loan Index – This market capitalization-weighted index tracks the U.S. leveraged loan market.

MSCI All Country World Index (MSCI ACWI) – This market capitalization-weighted index is designed to provide a broad measure of stock performance throughout the world. It comprises stocks from 23 developed countries and 24 emerging markets.

Non-Qualified Mortgage (Non-QM) – Any home loan that doesn't comply with the Consumer Financial Protection Bureau's existing rules on qualified mortgages (QMs). Usually this type of alternative mortgage loan accommodates people who are not able to prove they are capable of making the mortgage payments. Just because it is a non-QM mortgage loan does not necessarily mean high risk or subprime mortgage risk, and in many cases these non-QM mortgage loans require a high FICO score but simply do not check all the boxes associated with a QM loan. Non-QM loans for mortgages are protected by the lender against any type of lawsuit should the borrower become unable to afford the loan.

Residential Mortgage-Backed Securities (RMBS) – Residential mortgage-backed securities are debt-based assets backed by the interest paid on residential loans.

Sharpe Ratio – Used to help investors understand the return of an investment compared to its risk. The ratio is the average return earned in excess of the risk-free rate per unit of volatility or total risk. Volatility is a measure of the price fluctuations of an asset or portfolio. Subtracting the risk-free rate from the mean return allows an investor to better isolate the profits associated with risk-taking activities. The risk-free rate of return is the return on an investment with zero risk, meaning it's the return investors could expect for taking no risk. The yield for a U.S. Treasury bond, for example, could be used as the risk-free rate.

Spread – Difference between yields on differing debt instruments, calculated by deducting the yield of one instrument from another. The higher the yield spread, the greater the difference between the yields offered by each instrument. The spread can be measured between debt instruments of differing maturities, credit ratings or risk.

Standard Deviation – Measure of the variation or dispersion of a set of data from its mean or expected/budgeted value. A low standard deviation indicates that the data points tend to be very close to the mean, whereas a high standard deviation indicates that the data is spread out over a large range of values. A measure of an investment's volatility.

Yield to Maturity (YTM) – The total return anticipated on a bond if the bond is held until it matures. Yield to maturity is considered a long-term bond yield but is expressed as an annual rate.

You cannot invest directly in an index.

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December 2024

Ken Shinoda, CFA
Portfolio Manager
Structured Products

Mr. Shinoda joined DoubleLine at inception in 2009. He is Chairman of the Structured Products Committee and oversees the non-Agency RMBS team specializing in investing in non-Agency mortgage-backed securities, residential whole loans and other mortgage-related opportunities. Mr. Shinoda is co-Portfolio Manager on the Total Return, Opportunistic Income, Income, Opportunistic MBS and Strategic MBS strategies. He is also lead Portfolio Manager overseeing the Mortgage Opportunities private funds. Mr. Shinoda is also a permanent member of the Fixed Income Asset Allocation Committee, as well as, participating in the Global Asset Allocation Committee. In addition, he hosts DoubleLine's "Channel 11 News" (Twitter @DLineChannel11, dline11@doubleline.com), a webcast series that provides market insights and commentary with peers and industry experts. Prior to DoubleLine, Mr. Shinoda was Vice President at TCW where he worked in portfolio management and trading. He holds a B.S. in Business Administration from the University of Southern California and is a CFA® charterholder.

Robert Cohen, CFA
Director
Global Developed Credit

Mr. Cohen joined DoubleLine in 2012. He is a Portfolio Manager and Director of the Global Developed Credit team. Mr. Cohen oversees the team's investment activities in investment grade, high yield (HY) and bank loan corporate credit markets. He also leads the collateralized loan obligation (CLO) issuance effort at the firm. Mr. Cohen is a Portfolio Manager for the Opportunistic Income, Income Solutions, Low Duration, CLO and Floating Rate strategies. He is a permanent member of the Fixed Income Asset Allocation Committee. Prior to DoubleLine, Mr. Cohen was a Senior Credit Analyst at West Gate Horizons Advisors (and its predecessor, ING Capital Advisors), where he worked as an Analyst covering bank loans and HY bonds. Prior to ING, he was an Assistant Vice President in the Asset Management Group of Union Bank, where he managed CLO and bank loan portfolios. Prior to Union Bank, Mr. Cohen was an Associate Director of Corporate and Investment Banking at the Bank of Montreal in its Natural Resources Group. He holds a B.A. in Economics from the University of Arizona and an MBA from the University of Southern California. Mr. Cohen is a CFA® charterholder.

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